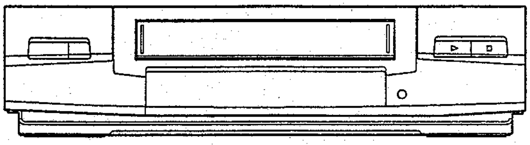
1995

MITSUBISHI

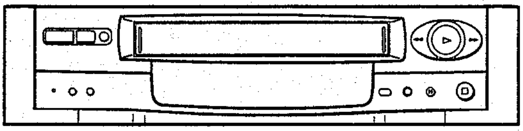
# Service Manual

VIDEO CASSETTE RECORDER

VHS
PAL



HS-550



HS-551

MODEL
**HS-550V(B)**
**HS-551V(B)**
**HS-551V(E)**
**HS-551V(G)**
**HS-551V(IR)**
**HS-551V(Y)**

Only cassettes marked VHS can be used with this video cassette recorder.

## SPECIFICATION

**Tape Format** : VHS 1/2" high-density video cassette tape
**Power Source** : AC 230V ; 50Hz
**Power Consumption** : Approx. 33W
**Television System** : 625lines, 50fields
System CCIR B&G PAL [551V(E)/(Y)/(G)]
System CCIR I PAL [550V(B)/551V(B)/(IR)]
**Video Recording System** : Azimuth helical scanning system
**Luminance** : Frequency modulation recording
**Colour Signal** : Low frequency conversion subcarrier phase shift recording
**Hi-Fi Audio Recording System** : Azimuth helical scanning system, Frequency modulation, deep layer recording
**Linear Audio Track** : 1 track
**Tape Speed** : 23.39mm/sec (PAL SP mode)
11.70mm/sec (PAL LP mode)
**Record/Playback Time** : 240min. with E-240 cassette (PAL SP mode)
480min. with E-240 cassette (PAL LP mode)
**Heads:Video** : 4 rotary heads
**Hi-Fi Audio** : 2 rotary heads
**Audio/Control** : 1 stationary head
**Erase** : 1 full track head

**Video Input** : 0.5 to 2.0Vp-p, 75Ω unbalanced EURO AV socket, RCA pin plug
**Audio Input:Line** : –8dBs, 50kΩ unbalanced EURO AV socket, RCA pin plug
**Video Output** : 1.0Vp-p, 75Ω unbalanced EURO AV socket
**Audio Output** : –6dBs, 1kΩ unbalanced EURO AV socket and RCA pin plug
**TV Tuner VHF** : 47~470MHz [551V(E)/(Y)/(G)]
44~89MHz, 104~300MHz[551V(IR)]
**UHF** : 470~862MHz[All]
**Operating Temperature** : 5°C to 40°C
**RF Channel Output** : Set to Channel 36 [550V(B)/551V(B)/(G)/(E)/(Y)]
Set to Channel 38 [551V(IR)]
(Channel 32~40 selectable)
**Weight** : Approx. 5.4kg
**Dimensions** : 380(W)×94(H)×326(D)mm [550]
380(W)×94(H)×335(D)mm [551]
**Timer** : 8 programmes for any channels in one month/every day/every week day
24 hour digital synchronized with oscillator frequency.
**Channel Selection** : 60 position Up/Down + EXT
**Deck** : J Deck

- Weight and dimensions shown are approximate.
- Design and specifications are subject to change without notice.

MITSUBISHI ELECTRIC

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# DISASSEMBLY

**Note:** Any screw can be used between silver screw securing the boss of the molded parts and 669D220030 (preferred part) for replacement because they are compatible with each other.

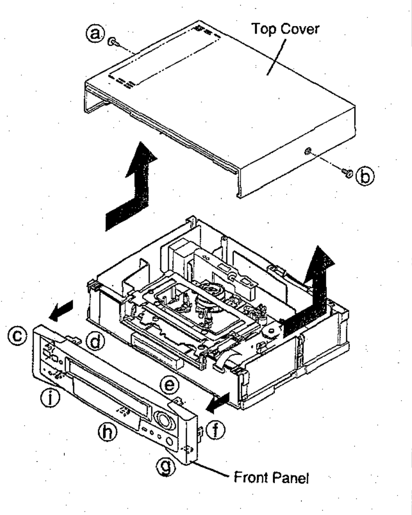

Fig. 1

## 1. Removal of Top Cover

① Remove the two Top Cover fastening screws (ⓐ and ⓑ) shown in Fig. 1 and remove the Top Cover in the direction shown by the arrows.

## 2. Removal of Front Panel

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Unfasten seven catches (ⓒ~ⓙ), two on the top, two on the side, and three on the bottom, and remove the Front Panel in the direction shown by the arrows.

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## 4. Removal of Bottom Panel

① Remove five fastening screws (ⓐ~ⓔ) shown in Fig. 3.

② Push the two inside hooks (ⓕ and ⓖ), holding the Bottom Panel and slide the Bottom Panel toward the rear to remove it.

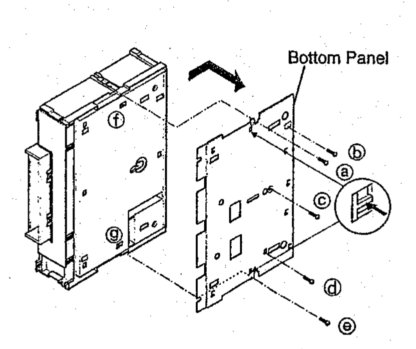


Fig. 3

## 5. Removal of Assy Deck

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the barrier.
(Refer to Para. 3 of the DISASSEMBLY.)

③ Remove the three fastening screws (ⓐ,ⓑ and ⓒ) on the bottom of the set shown in Fig. 4.

④ Remove the five screws (ⓓ~ⓗ) holding the Assy Deck, shown in Fig. 5, and disconnect the connectors ML, MM and ME.

⑤ Slowly raise the Assy Deck upward to remove it.

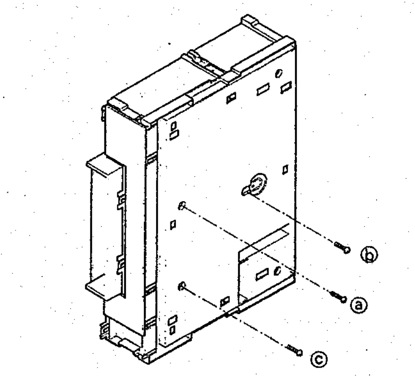


Fig. 4

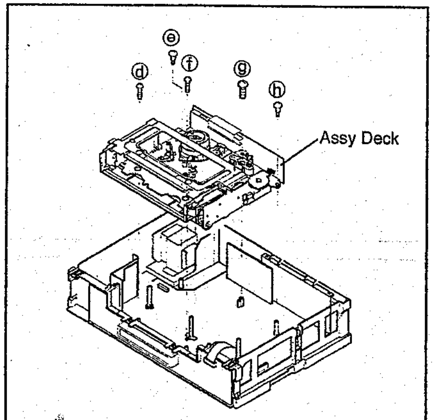


Fig. 5

# HOW TO EXECUTE CIRCUIT BOARD SERVICE

**CAUTION:**

**BEFORE ATTEMPTING TO REMOVE OR REPAIR ANY PCB, UNPLUG THE POWER CORD FROM THE A.C. SOURCE.**

## LOCATION OF PRINT CIRCUIT BOARDS

**Note:**

- Take caution when removing flat cables to prevent any contact problem.
- Connect and disconnect the flat cables at right angles to the connector and make sure that it is completely secured.
- After servicing the PCB, restore the flat cable and leads to their former state.

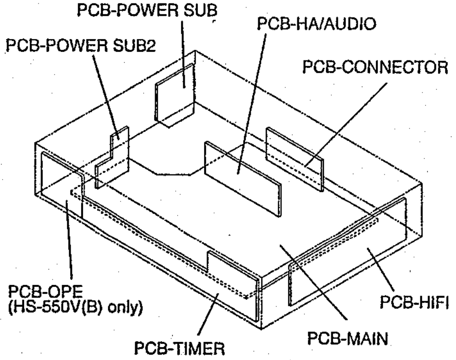


Fig. 6

## 1. PCB-MAIN

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY. )

② Remove the barrier.
(Refer to Para. 3 of the DISASSEMBLY.)
Servicing on the components side is partially possible.

③ Remove the Front Panel.
(Refer to Para. 2 of the DISASSEMBLY.)
Remove eight fastening screws referred to as ③ and ④ in Para. 5 of the DISASSEMBLY. (Do not disconnect the connector ML, MM and ME.)

④ Raise the front side of the Assy Deck upward as shown in Fig. 7 and support it with a screw driver, etc. Servicing on the components side of the PCB is now possible.

⑤ If necessary to remove PCB-MAIN completely, remove the Assy Deck. (Refer to Para. 5 of the DISASSEMBLY.) Remove all connectors on the PCB-MAIN. Remove one fastening screw (ⓐ) on the bottom and two fastening screws (ⓑ and ⓒ) on the Antenna Cover shown in Fig. 8. Raise the PCB-MAIN upward to remove it.

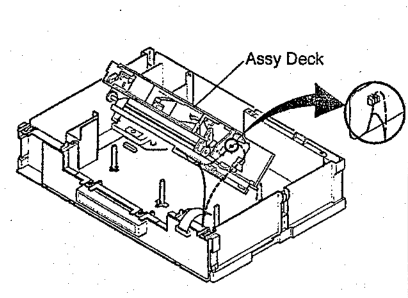


Fig. 7

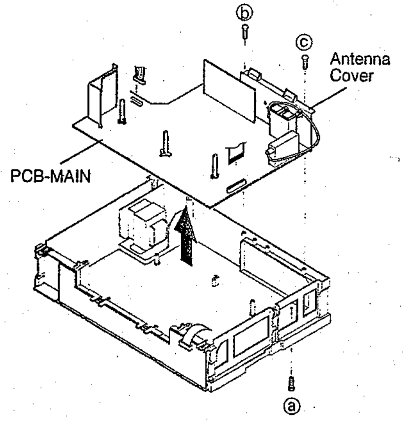


Fig. 8

## Service of Transistors (Q902, Q903, Q904 and Q911)

) Disconnect the power plug.

) Remove the four screws (ⓐ, ⓑ, ⓒ and ⓓ: 669D222090) shown in Fig. 9.

OTE: Check that each transistor (Q902, Q903, Q904 and Q911) is connected to the Heat sink before turning the power on. If the power is turned on without installing the Heat sink, Q902, Q903, Q904 and Q911 are broken.

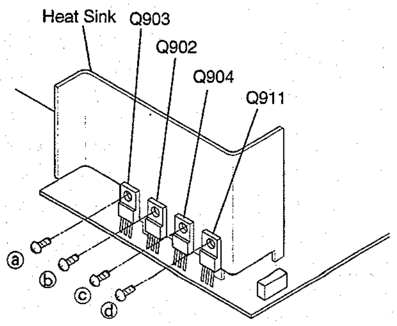


Fig. 9

## . PCB-CONNECTOR

) Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

) If it is necessary to remove the PCB-CONNECTOR comply with the following steps.

(1) Remove the PCB-MAIN.
(Refer to the preceding paragraph.)

(2) Remove four screws (ⓐ,ⓑ,ⓒ and ⓓ), unfasten five catches (ⓔ~ⓘ) on the Antenna Cover as shown in Fig.10, and remove the Antenna Cover.

(3) Raise the PCB-CONNECTOR upward to remove it.

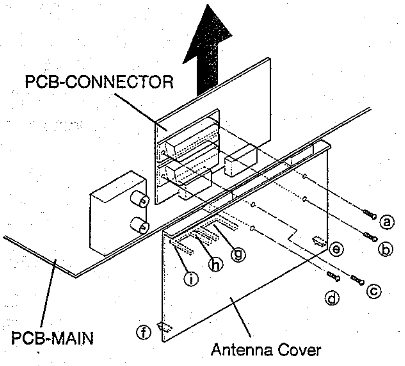


Fig. 10

## . PCB-HIFI

) Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)
Servicing on the component side is possible.

) If it is necessary to remove the PCB-HIFI, comply with the following steps.

(1) Remove a screw (ⓐ) and unfasten two snaps (ⓑ and ⓒ) as shown in Fig.11.

(2) Disconnect the connectors ( HB , HC ) and raise the PCB-HIFI upward to remove it.

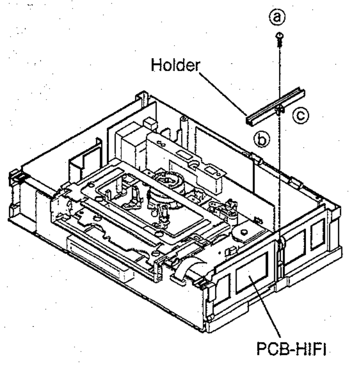


Fig. 11

## 4. PCB-TIMER/OPE (HS-550V(B) only)

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the Front Panel.
(Refer to Para. 2 of the DISASSEMBLY.)

③ Remove six catches (ⓐ~ⓕ), shown in Fig. 12, then remove the PCB-TIMER/OPE.

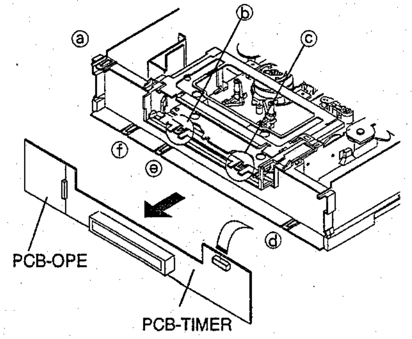


Fig. 12

## 4. PCB-TIMER (HS-551V only)

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the Front Panel.
(Refer to Para. 2 of the DISASSEMBLY.)

③ Remove five catches (ⓐ~ⓔ), shown in Fig. 13, then remove the PCB-TIMER.

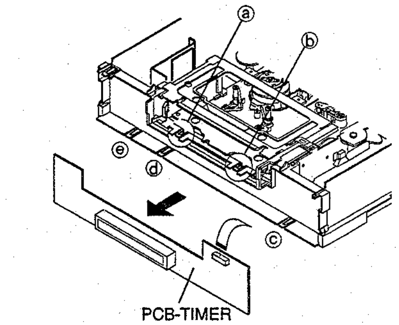


Fig. 13

## 5. PCB-HA/AUDIO

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the barrier.
(Refer to Para. 3 of the DISASSEMBLY.)
Servicing on the copper side is possible.

③ If necessary, remove the Assy Deck.
(Refer to Para. 5 of the DISASSEMBLY.)
Raise the Shield Cover upward to remove it. Disconnect three terminals (ⓐ,ⓑ and ⓒ), remove three fastening screws (ⓓ,ⓔ and ⓕ) shown in Fig. 14. Disconnect the connectors of Head FE, A/C Head, and Motor CP then remove the PCB-HA/AUDIO.

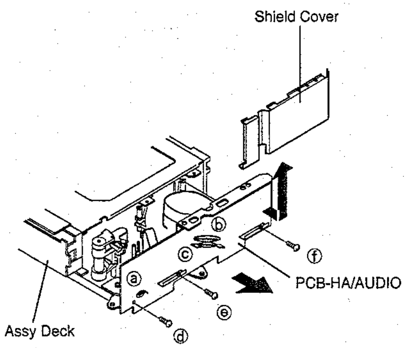


Fig.14

## 6. PCB-POWER SUB

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the barrier.
(Refer to Para. 3 of the DISASSEMBLY.)

③ Remove the holder of AC power cord from the Base Chassis shown in Fig. 15.

④ Disconnect connectors BB ( for the Power receptacle) and MD on the PCB-POWER SUB.

⑤ Remove one fastening screw (ⓐ) on the bottom, shown in Fig. 15, and two screws (ⓑ and ⓒ : 669D221040). Hold the transformer, and raise the PCB-POWER SUB to remove it.

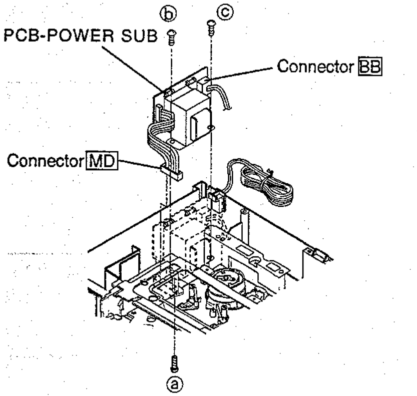


Fig.15

## 7. PCB-POWER SUB2

① Remove the Top Cover.
(Refer to Para. 1 of the DISASSEMBLY.)

② Remove the barrier.
(Refer to Para. 3 of the DISASSEMBLY.)

③ Raise the PCB-POWER SUB2 upward to remove it.

### * Service of Transistor (Q9A1)

(1) Disconnect the power plug.

(2) Remove a screw (ⓐ) shown in Fig. 16 to remove the Heat sink 1 in the direction shown by an arrow.

NOTE: Install Q9A1 on the Heat sink 1 and connect the PCB-POWER SUB2 to the PCB-MAIN. Then install the Heat sink 1 and turn the power on. If the power is turned on without installing PCB-POWER SUB2, Heat sink 1, Q9A1, Q902, Q903, Q904 and Q911 are broken.

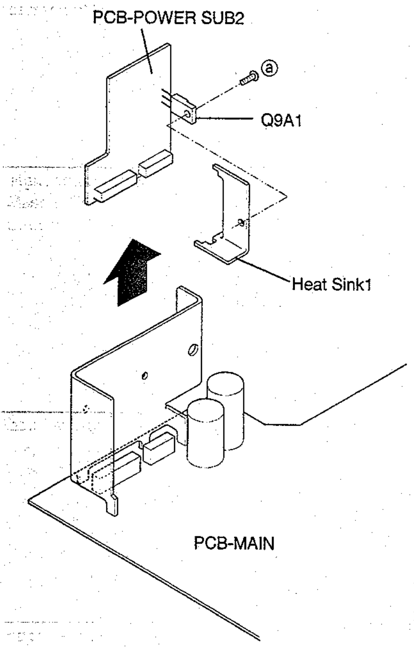
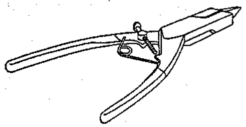
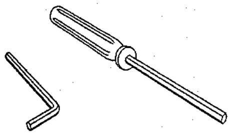
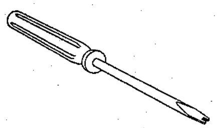
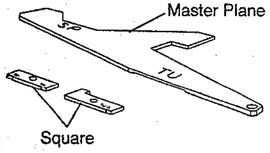
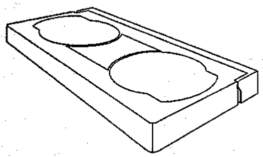
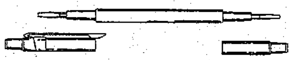
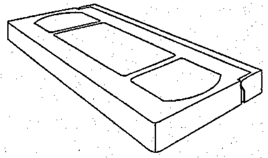


Fig. 16

## MECHANICAL ADJUSTMENT TOOLS

| | PURPOSE | METHOD |
|---|---|---|
| **Grip ring fixer** (859C347050)<br> | A tool for preventing the grip ring from opening excessively. | Opening the grip ring with the tips of this tool, install the grip ring on to the shaft. |
| **Hex Keys(1.5mm)**<br><br>(859C259020) (859C259050) | The hex keys are used for tightening or removing hexagonal socket head screws which fasten the guide rollers. | Insert the given size(1.5mm) hexagonal socket and turn. |
| **Adjustment Driver** (859C259080)<br> | For adjustment of guide rollers. | Carefully insert and adjust guide rollers. |
| **Height adjusting Jig**<br>**•Master Plane** (859C342020)<br>**•Square** (859C341070)<br> | The master plane and the square are used for measuring height and perpendicularity of the reel disk and Takeup guide arm. | The gauge is applied to the part being measured. |
| **Back Tension Gauge** (859C345080)<br> | The back tension gauge is used for measuring the tension of the tape on the supply side. | Load this gauge in the cassette housing and run in the play mode. Read the gauge indicator. |
| **Cotton gloves** | For changing, cleaning and handling of drum, heads and guides. | Use when handling all parts in the tape path. |
| **Grease**<br>**PG641** (859D055030)<br>**G** (859D055050)<br>**MULTEMP SH-M** (859D055060) | Lubrication of various parts. | To be applied as specified. |

# ELECTRICAL ADJUSTMENT TOOLS

| | PURPOSE | METHOD |
|---|---|---|
| **Adjustment Driver** **(859C338000)**<br>767-M<br> | The adjustment driver is intended to adjust variable resistors, trimmers, transformers etc.in the circuitry. | Select a tip suitable for the particular head of the component concerned and adjust. |
| **Alignment Tape**<br>**(PS-2 :859C339010)**<br>**(PM6KH3 :859C339030)**<br>**(PM3KE6(CH1) 25 :859C568050)**<br>**(PMX :859C568070)**<br> | Standard signals(VHS Standard) are recorded on the alignment tape and reproduced when required in the adjustment of Y/C circuit, audio circuit and interchangeability alignment. | Install and run in the play mode, the same as for an ordinary tape. |

## HOW TO INITIALIZE THE E²PROM

The E²PROM is not initialized before shipping, so the E²PROM must be initialized when replaced.

**Initialize the E²PROM by following the steps below.**

1. Set the VCR to "CLOCK SET" mode.
2. Push **COUNTER RESET** button on the remote hand unit for 8 seconds.

## VCR OPERATION IN SERVICE POSITIONS [B] AND [C]

Refer to page 10 for Service Position Information.

### ■ To activate PB, REC, FF or REW Mode (Service position [B] only)

- Cover the END SENSOR first then START SENSOR with an infra-red opaque material e.g. black vinyl tape etc..
- The reel sensor must provide input "rotating" signals to the microprocessor. To provide a dummy reel rotating signal, connect TP2H to TP5J8 on PCB-MAIN.

**CAUTION:**

Because the Start and End sensors are disabled there will be a risk of END of TAPE damage in REW and FF Modes.

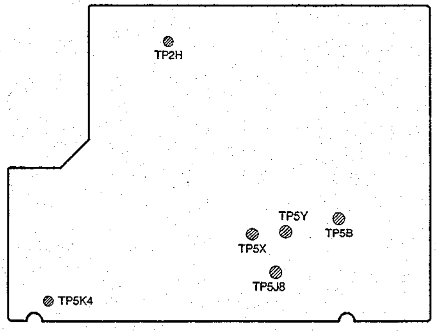
### ■ Ejecting a tape

When TAPE EJECT is necessary, disconnect the main supply and reinstall the DECK ASSY to the Service Position [A], restore power then EJECT the tape.

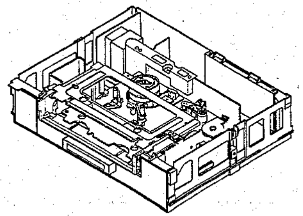
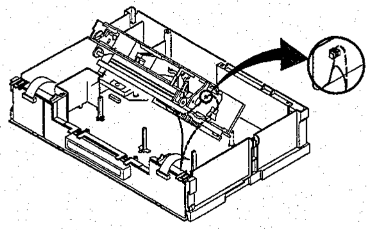
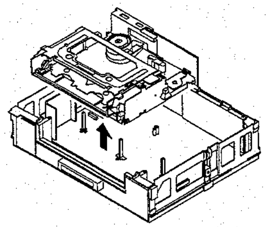
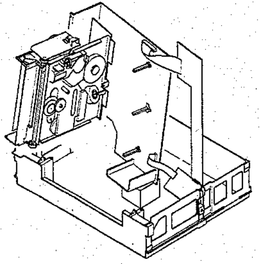
### ■ Record Protection Method

- To protect TEST TAPE(s) from accidental Recording (erasure) during testing, connect TP5B (STBY 5V) to TP5K4 on PCB-MAIN .

**PCB-MAIN(Component side)**



When replacing parts or performing service adjustments, place the unit in the service positions shown below. Refer to page 9 for additional information about Service Positions.

| Service Position | Service Item |
|---|---|
| (A)<br> | • Remove the top cover and the front panel.<br>(1) Worn parts on the deck (upper drum, pinch roller assembly, A/C head, and FE head) can be replaced.<br>(2) Checks at test points may be made to isolate a problem to a specific circuit. |
| (B)<br> | • Unfasten the clamper secaring ML lead wire on the desk.<br>• Remove the screws holding the deck, raise the front of the deck upward, and hold it in place with a screw driver, etc.<br>(1) Worn parts on the deck (reel belt, idler assembly, and capstan motor) can be replaced.<br>(2) The performance of the deck can be checked.<br>• The REC safety switch does not operate in position (B).<br>• Set the deck to service position (A) and load the cassette tape. Then turn the power off and set the deck to service position (B). Cover the start and end sensors, and short-circuit test points TP2H to TP5J8. Turn the power on and play the tape. (Do not use the start or end portion of the tape.)<br>• If it is necessary to eject the tape, turn the power off and set the deck to the service position (A). Turn the power on again and eject the tape. |
| (C)<br> | • Remove the screws holding the deck and disconnect the deck from the connector.<br>(1) Parts on the deck (drum assembly, PCB-HA/AUDIO etc.) can be replaced.<br>(2) The EE picture can be displayed with the deck removed by short-circuiting TP5X to TP5Y. (Short-circuit before turning the power on.) (Playback and recording operation can not be checked.) |
| (D)<br> | • Remove the PCB-TIMER/OPE.<br>• Remove the deck with the PCB-MAIN attached.<br>• Position insulating cushions as, shown in Figure D, supporting the supply side of the Cassette Housing, the Deck Base and the PCB-MAIN.<br>**Note**<br>Take care that the Deck, PCB-MAIN and inter connecting leads DO NOT touch the Power Transformer or the heat sink.<br>(1) The foil side of the PCB-MAIN can be serviced in this position.<br>* If the bottom cover is removed, IC5A0 and IC4A0 are accessible for service. |

# Electrical Adjustments

Perform only the alignments required. If proper equipment is not available, do not attempt an alignment.

## ■ PRE-ADJUSTMENT SETTING

- Set the "COLOUR SYSTEM" to "PAL" mode in the MENU. (Only HS-551V(Y), (E), (G))
- Set the "STEREO/A2" to "OFF" mode in the MENU. (Only HS-551V(Y))
- Set the "NICAM" to "OFF" mode in the MENU. (Only HS-551V(B), (IR)/HS-550V(B))
- Set the "NICAM/A2" to "OFF" mode in the MENU. (Only HS-551V(E))
- Set the "STEREO/2-TON" to "OFF" mode in the MENU. (Only HS-551V(G))
- Set the "TAPE OPTIMIZER" to "OFF" mode in the INITIAL SET-UP of MENU. (Only HS-551V(Y),(E), (B), (IR)/HS-550V(B))
- Set the "BAND OPTIMIERUNG" to "OFF" mode in the INITIAL SET-UP of MENU. ( Only HS-551V(G))
- Set the "RENTAL PB" to "OFF" position.

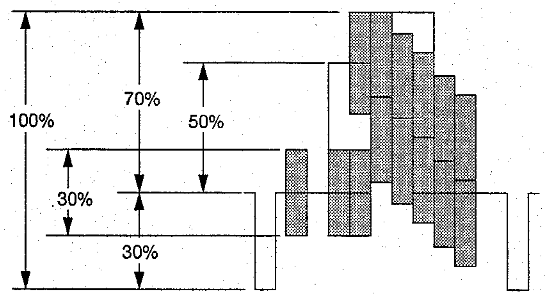
## ■ MEASURING EQUIPMENT AND JIGS

- Oscilloscope (10:1 unless 1:1 specified.)
- Signal generator
- Frequency counter
- Audio tester
- Electrical tools

## ■ TEST SIGNAL

**Colour bar signal**

In this manual, unless otherwise specified in particular, use colour bar signal in specifications below.

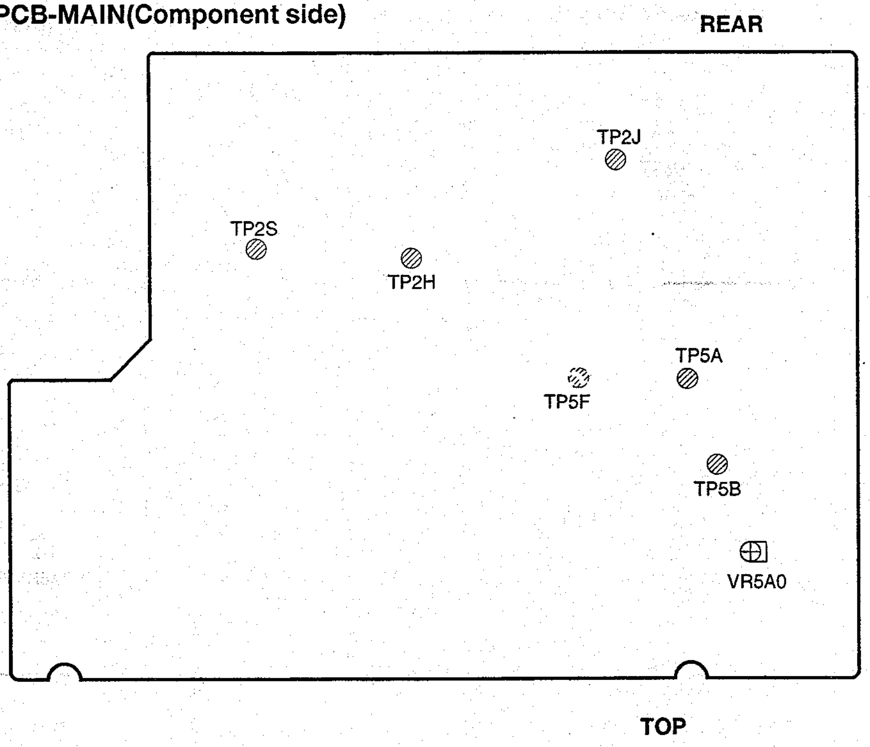


PAL

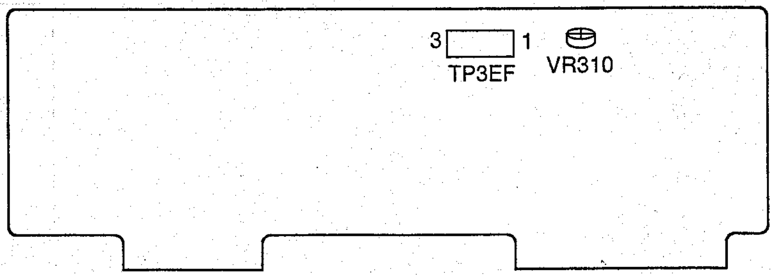
**Split-Field colour bar(with 100% window)**

# LOCATIONS

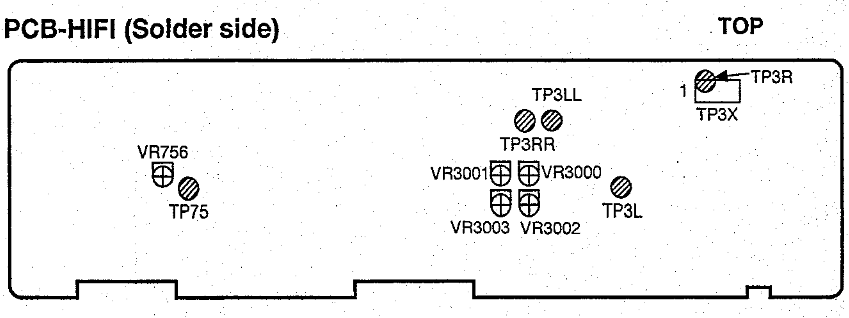
## PCB-MAIN(Component side)


REAR
TP2J
TP2S
TP2H
TP5A
TP5F
TP5B
VR5A0
TOP

## PCB-HA/AUDIO(Component side)


3
1
TP3EF
VR310

## PCB-HIFI (Solder side)

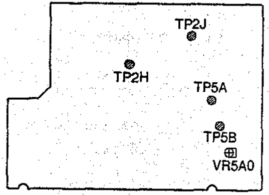

TOP
TP3R
1
TP3X
TP3LL
TP3RR
VR756
TP75
VR3001
VR3000
VR3003
VR3002
TP3L

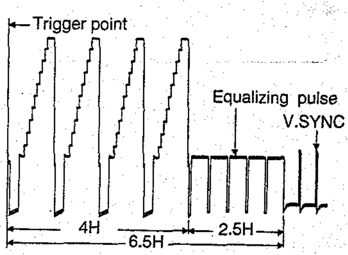
| | | |
|---|---|---|
| **[ Servo circuit ]**<br>1. Playback Switching Point | **Adjustment purpose** | Video switch over timing during playback. |
| | **Symptom when incorrectly adjusted** | Switching noise or jitter in the playback picture. |

| Measuring instrument and condition | | VCR set up condition | |
|---|---|---|---|
| Oscilloscope | | Input signal | – – – |
| Test point | TP2J | Using tape | Alignment tape (PS2, stair step) |
| EXT trigger | TP2H | VCR condition | Playback |
| Measurement range | DIV 20mV<br>TIM 50µs | Using Jig | – – – |

1. Playback an alignment tape (PS2, stair step).
2. Short-circuit TP5A to TP5B. Confirm that the "DTR" displayed in Fluorescent Display flashes fast.
3. Set the oscilloscope's slope to (–).
4. Observe the waveform at TP2J.
5. Adjust VR5A0 so that the trigger point is located at 6.5 ± 1.0H before the vertical synchronizing signal.

**PCB-MAIN (Component side)**





| | | |
|---|---|---|
| **[ Audio circuit ]**<br>2. Audio Bias Level | **Adjustment purpose** | Audio bias level during recording. |
| | **Symptom when incorrectly adjusted** | Poor audio high frequency response or distortion. |

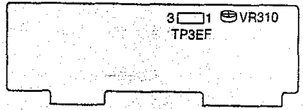
| Measuring instrument and condition | | VCR set up condition | |
|---|---|---|---|
| Audio tester | | Input signal | – – – |
| Test point | TP3EF pin ①, pin ③ | Using tape | A blank tape |
| EXT trigger | – – – | VCR condition | SP REC |
| Measurement range | – – – | Using Jig | High pass filter |

1. Supply no signal.
2. Short-circuit EURO AV socket pin ② (AUDIO IN) and pin ④ (GND) using an electrolytic capacitor (16V or more 10µF).
3. Set the VCR to SP REC mode.
4. Observe the audio level at TP3EF pin ① and pin ③ with an Audio Tester using a high pass filter.
5. Confirm that the monitor TV etc. does not affect the indication of the audio tester and then adjust VR310 so that the level is 2.6mVr.m.s.

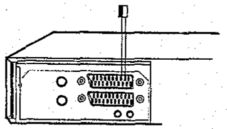
**Note 1:**
Be careful that the audio tester housing does not touch the VCR chassis.

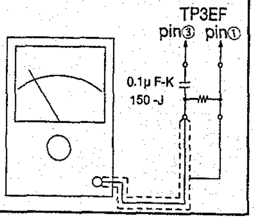
**Note 2:**
Never set the VCR to Play mode with the audio tester connected.
(The audio amplifier will be over loaded.)

**PCB-HA/AUDIO (Component side)**



C-ELE16V or more 10µF



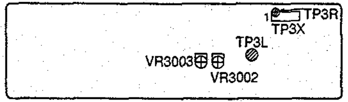


| | | |
|---|---|---|
| **[ Hi-Fi Audio circuit ]**<br>3. VCO (HS-550V(B) / HS-551V(B) only) | **Adjustment purpose** | Set up of FM carrier frequency for Hi-Fi audio. |
| | **Symptom when incorrectly adjusted** | Buzz only. |

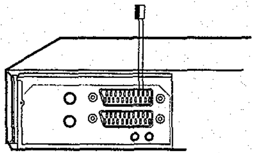
| Measuring instrument and condition | | VCR set up condition | |
|---|---|---|---|
| Frequency counter | | Input signal | – – – |
| Test point | TP3L<br>TP3X pin ① (TP3R) | Using tape | – – – |
| EXT trigger | – – – | VCR condition | STOP |
| Measurement range | – – – | Using Jig | – – – |

1. Set the CHANNEL position to "L1".
2. Set the MONITOR button on the remote hand unit to "STEREO" mode.
3. Short-circuit EURO AV socket pin ② (AUDIO IN) and pin ④ (GND) using an electrolytic capacitor (16V or more 10µF).
4. Observe the frequency at TP3L.
5. Ajust VR3002 so that the frequency is 1.400MHz ± 3kHz.
6. Observe the frequency at TP3X pin ① (TP3R).
7. Adjust VR3003 so that the frequency is 1.800MHz ± 3kHz.

**PCB-HIFI (Solder side)**



C-ELE16V or more 10µF

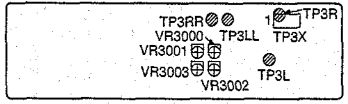


| | | |
|---|---|---|
| **[ Hi-Fi Audio circuit ]**<br>3. VCO (HS-551V(Y)/(E)/(IR)/(G) only) | **Adjustment purpose** | Set up of FM carrier frequency for Hi-Fi audio. |
| | **Symptom when incorrectly adjusted** | Buzz only. |

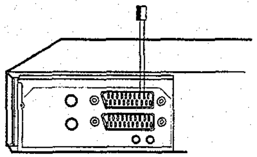
| Measuring instrument and condition | | VCR set up condition | |
|---|---|---|---|
| Frequency counter | | Input signal | – – – |
| Test point | TP3L<br>TP3X pin ① (TP3R) | Using tape | – – – |
| EXT trigger | – – – | VCR condition | STOP |
| Measurement range | – – – | Using Jig | – – – |

1. Set the CHANNEL position to "L1".
2. Set the MONITOR button on the remote hand unit to "STEREO" mode.
3. Short-circuit EURO AV socket pin ② (AUDIO IN) and pin ④ (GND) using an electrolytic capacitor (16V or more 10µF).
4. Short-circuit TP3LL to TP 3X pin ③ (GND).
5. Observe the frequency at TP3L.
6. Ajust VR3002 so that the frequency is 1.300MHz ± 3kHz.
7. Open-circuit TP3LL and TP 3X pin ③ (GND).
8. Short-circuit TP3RR to TP 3X pin ③ (GND).
9. Observe the frequency at TP 3X pin ① (TP3R).
10. Adjust VR3003 so that the frequency is 1.700MHz ± 3kHz.
11. Open-circuit TP3RR to TP 3X pin ③ (GND).
12. Observe the frequency at TP3L.
13. Adjust VR3000 so that the frequency is 1.400MHz ± 3kHz.
14. Observe the frequency at TP 3X pin ① (TP3R).
15. Adjust VR3001 so that the frequency is 1.800MHz ± 3kHz.

**PCB-HIFI (Solder side)**



C-ELE16V or more 10µF



|  |  |  |
|---|---|---|
| **[ Dual Audio circuit ]**<br>4. Channel Separation<br>(HS-551V(Y)/(E)/(G) only) | **Adjustment purpose** | Positioning of audio separation. |
|  | **Symptom when incorrectly adjusted** | Mixing audio separation. |

| Measuring instrument and condition |  | VCR set up condition |  |
|---|---|---|---|
| Oscilloscope |  | Input signal | RF signal (Stereo sound) |
| Test point | TP75 | Using tape | – – – |
| EXT trigger | – – – | VCR condition | STOP |
| Measurement range | DIV 5mV<br>TIM 2ms | Using Jig | – – – |

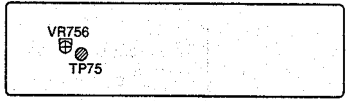
1. Supply a Stereo mode RF signal.

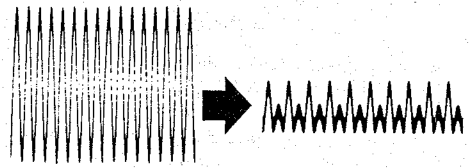
| PILOT | 50% AM MODULATION |
|---|---|
| RIGHT CH | 1kHz,100% FM MODULATION |
| LEFT CH | NO MODULATION |
| RF INPUT | 70dB µ (75Ω LOAD) |

2. Observe the waveform at TP75.
3. Adjust VR756 so that the audio output signal at L-CH is minimum.

**Note:** This adjustment should be done precisely because it determines the separation.

**PCB-HIFI (Sloder side)**



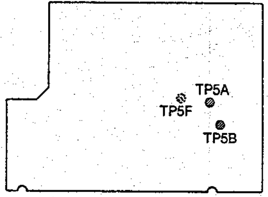


|  |  |  |
|---|---|---|
| **[ Timer circuit ]**<br>5. Clock Frequency Correction | **Adjustment purpose** | Accuracy of clock. |
|  | **Symptom when incorrectly adjusted** | Poor clock accuracy. |

| Measuring instrument and condition |  | VCR set up condition |  |
|---|---|---|---|
| Frequency Counter |  | Input signal | – – – |
| Test point | TP5F | Using tape | – – – |
| EXT trigger | – – – | VCR condition | Power off |
| Measurement range | – – – | Using Jig | – – – |

1. Set the VCR to EJECT position (with the tape ejected from the VCR).
2. Short-circuit TP5A to TP5B.
3. Observe the frequency at TP5F.
4. Be certain that the frequency is between 262.1000～262.1882kHz.
5. Use the number buttons on the remote hand unit to enter the last three digits of the frequency counter reading (262.1ⓐⓑⓒkHz). Enter the digits in ⓐⓑⓒ sequence.
6. Push the REC button on a remote hand unit.
7. Open circuit TP5A to TP5B.

**PCB-MAIN (Component side)**



# MECHANICAL ADJUSTMENT AND REPLACEMENT

## 1.Cleaning of Deck

The following parts require cleaning whenever serviced to maintain satisfactory performance.

### 1-1 Video Head

A.Clean the video heads by the following method. Dust and other foreign objects on the video heads disturbs the normal playback picture:
Dampen a video head cleaning cloth with alcohol. Hold the cloth against the drum and turn the drum slowly counterclockwise to clean.

**NOTE:**
Do not directly touch the head attached to the upper drum. The head is very hard but brittle to impact, especially in the vertical direction.
Do not apply force in the vertical direction.

B.Allow residual alcohol to dry thoroughly before running tape. Otherwise, the liquid may stick to and damage the tape.

### 1-2 Tape Transport (Refer to Fig. 1-1.)

Clean the following parts of the tape transport.

1. Tension arm
2. Supply guide pole
3. FE head
4. ASSY IMPEDANCE ROLLER
5. Supply slant pole
6. Upper and lower drum
7. Takeup slant pole
8. A/C head
9. Takeup guide pole
10. Capstan shaft
11. Takeup guide arm
12. Supply guide roller
13. Takeup guide roller
14. Pinch roller

A.Clean the tape transport using gauze dampened with alcohol,except the supply guide roller, takeup guide roller and pinch roller. If Guide rollers and pinch roller are stained with dust,clean them with dry gauze or replace them with new parts.

B.Allow residual alcohol to dry thoroughly before running a tape. Otherwise the liquid may stick to and damage the tape.

### 1-3 Reel Disk Drive System

Clean the reel disk braking surfaces and the reel belt.

A.Clean the reel disk braking surfaces with gauze dampened with alcohol.
- After the alcohol dries completely, perform "Adjustment of Back Tension and Tension Pole Position" (Item 3-1).

B. If the Reel belt is stained with dust, clean it with dry gauze or exchange it for a new part.

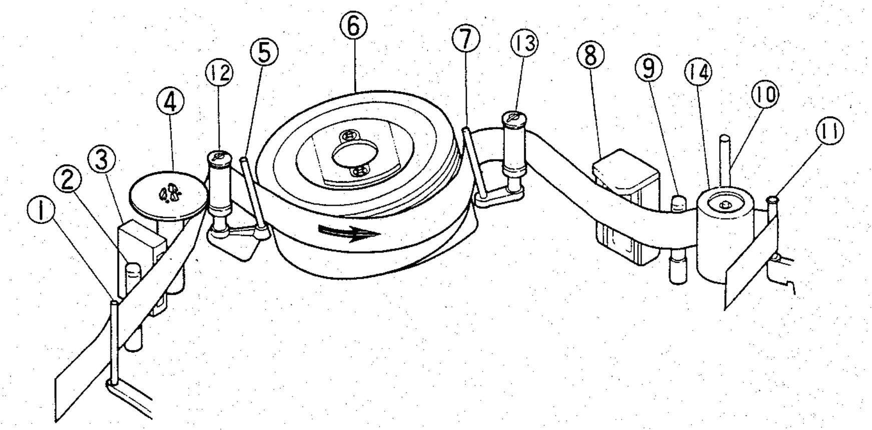


Fig. 1-1

## 2. Replacement of Major Parts

### 2-1 Cassette Housing

(Removal)

① Set the VCR to the eject mode.

② Remove the top cover and the front panel.

③ Unfasten the clamp holding the lead of the loading motor, which is attached to the side plate of the cassette housing. Unscrew the two cassette housing fastening screws (ⓐ and ⓑ). Slowly raise the cassette housing in the direction shown by the arrow. (Refer to Fig. 2-1-1.)

(Installation)

① Make sure that the holes (matching mark M) on the body and cogwheel of the mode switch align with each other as shown in Fig. 2-1-2. At the same time confirm that the hole of the gear pinch aligns with the matching marks of the gear joint J and the ▽ mark on the mode switch cogwheel,refer to Fig. 2-19-5. This indicates the J deck is in the EJECT mode.

② If the deck is not completely set to the eject position, turn part A of the pulley worm J by hand to set the eject position. (Refer to Fig. 2-1-4)
Turn in the direction a ••••••for loading
Turn in the direction b ••••••for unloading

③ Slowly lower the cassette housing onto the main plate of the deck.

④ Make sure the record safety lever enters between the insert guide of the cassette housing and the shaft as shown in Fig. 2-1-3. Align the four points (ⓒ, ⓓ, ⓔ and ⓕ), located on the bottom of the housing with the matching holes in the deck. Secure the cassette housing on the deck with the two screws (ⓐ and ⓑ).
(Refer to Fig. 2-1-1.)

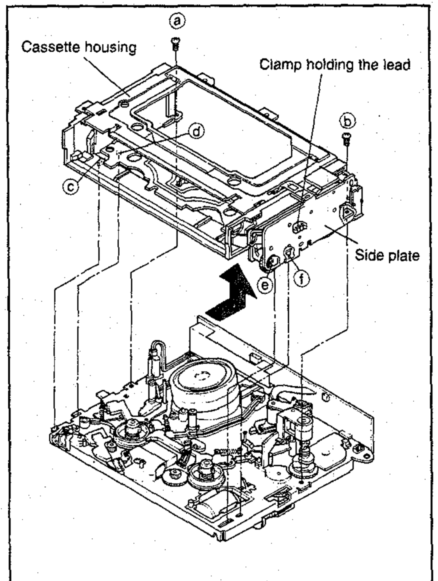

ⓐ
Cassette housing
Clamp holding the lead
ⓑ
ⓓ
ⓒ
Side plate
ⓔ
ⓕ

Fig. 2-1-1

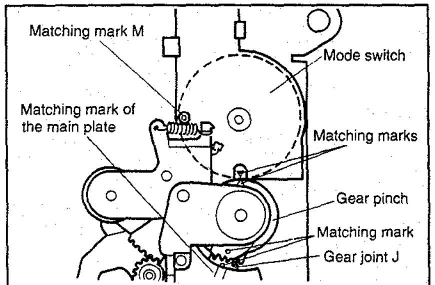

Matching mark M
Mode switch
Matching mark of the main plate
Matching marks
Gear pinch
Matching mark
Gear joint J

Fig. 2-1-2

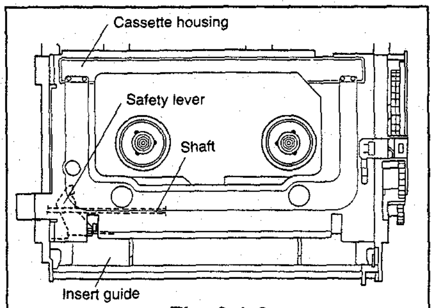

Cassette housing
Safety lever
Shaft
Insert guide

Fig. 2-1-3

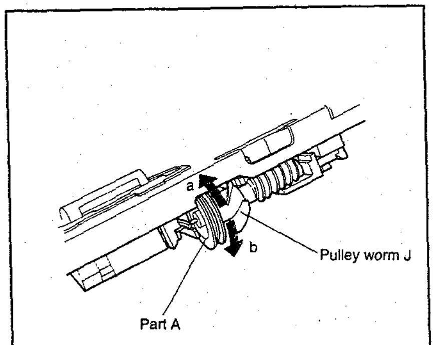

a
b
Pulley worm J
Part A

Fig. 2-1-4

### 2-2 Sens Gear, Drive Gear, Takeup Arm, and Arm Spring (TU)

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Unfasten the four catches (ⓐ, ⓑ, ⓒ and ⓓ) as shown in Fig. 2-2-1 and remove the side plate.

③ Remove the sens gear.

④ Pull the lock levers on both the supply and takeup sides, shown in Fig. 2-6-1, in the direction shown by the arrow to shift the bottom plate to the position shown in Fig. 2-6-2.

⑤ Remove the takeup arm.

⑥ To remove the drive gear from the sens gear, turn and pull the drive gear in the direction shown by the arrow shown in Fig. 2-2-3.

⑦ Remove the arm spring (TU) from the takeup arm as shown in Fig. 2-2-4.

(Installation)

① Apply the grease (MULTEMP SH-M)[859D055O60] to the area of the new takeup arm shown in Fig. 2-2-4.

② Apply the grease (MULTEMP SH-M)[859D055O60] to the area shown in Fig. 2-2-5 of the new sens gear.

③ Apply the grease (MULTEMP SH-M)[859D055O60] to the area shown in Fig. 2-2-6 of the new sens gear.

④ Place the clip spring on the drive gear hooking one end under the catch as shown in Fig. 2-2-5. Install the sens gear on the drive gear so that hole A aligns with hole B. Hold the sens gear while turning the drive gear clockwise, in so doing engage the other end of the clip spring with the catch of the sens gear. The projection A of the sens gear must enter the hole B of the drive gear.

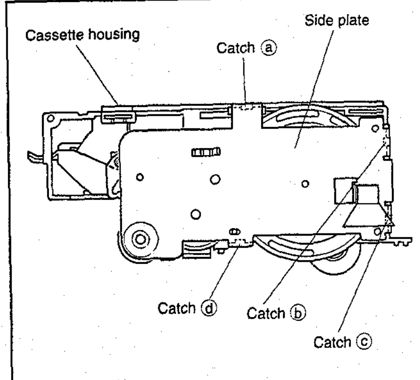

Cassette housing
Side plate
Catch ⓐ
Catch ⓓ
Catch ⓑ
Catch ⓒ

Fig. 2-2-1

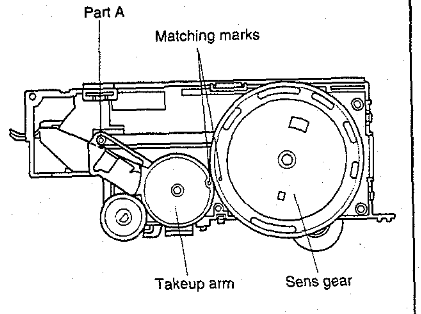

Part A
Matching marks
Takeup arm
Sens gear

Fig. 2-2-2

⑤ Ensure the spring action is effective by holding the sens gear and turning the drive gear slightly clockwise, observing whether the drive gear returns when released.
⑥ Apply the grease (MULTEMP SH-M)[859D055O60] to the area of the new takeup arm shown in Fig. 2-2-7.
⑦ Install the takeup arm so that the shaft from the bottom plate enters between the takeup arm and takeup spring, after the bottom plate is in the position shown in Fig. 2-6-2.

**Note:** Install the takeup arm so that the engaging point between the supply arm and gear-S, and that between the takeup arm and gear-T are symmetrical as shown in Fig. 2-4-1.

⑧ Shift the bottom plate back to the eject position and install the sens gear so that the matching marks of the sens gear and the takeup arm align as shown in Fig. 2-2-2.
⑨ Install the side plate.
⑩ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

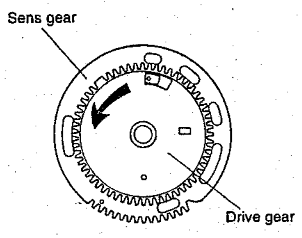

Sens gear
Drive gear

Fig. 2-2-3

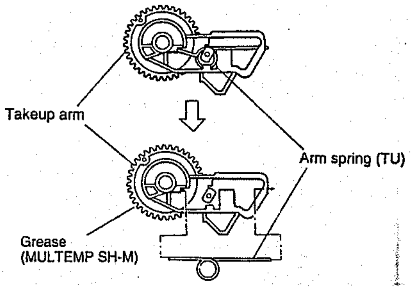

Takeup arm
Arm spring (TU)
Grease
(MULTEMP SH-M)

Fig. 2-2-4

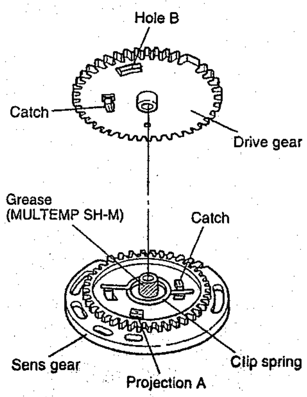

Hole B
Catch
Drive gear
Grease
(MULTEMP SH-M)
Catch
Sens gear
Projection A
Clip spring

Fig. 2-2-5

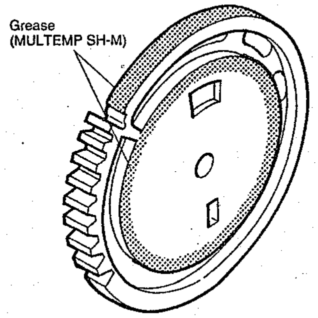

Grease
(MULTEMP SH-M)

Fig. 2-2-6

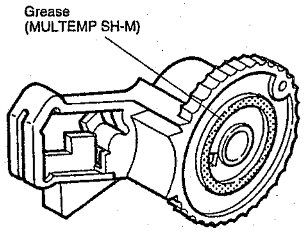

Grease
(MULTEMP SH-M)

Fig. 2-2-7

## 2-3 Door Arm

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Remove the side plate, sens gear, and takeup arm.
(Refer to Para. 2-2 for the removal method.)

③ Unfasten the catch shown in Fig. 2-3-1 to remove the door arm. (Pull the door arm at the same time as unfastening the catch.)

(Installation)

① Fix the door arm to the shaft A shown in Fig. 2-3-1 and secure it with the catch so that the parts A and B are inside of the cassette housing, as shown in Fig. 2-3-2.

② Install the takeup arm, sens gear, and side plate.
(Refer to Para. 2-2 for the installation method.)

③ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

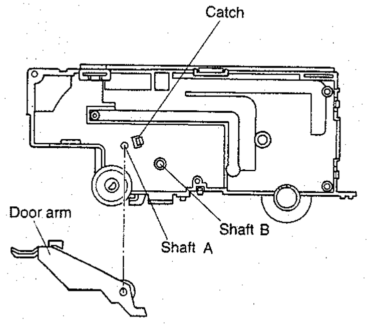


Fig. 2-3-1

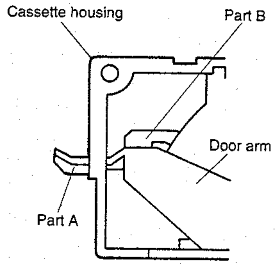


Fig. 2-3-2

## 2-4 Gear S and Gear T

(Removal)

① Follow the removal method in Items 1 to 5 of Para. 2-2.

② Unfasten the catch holding gear T from the inside of the cassette housing and remove the FL shaft to which the gear S and T are attached. (Refer to Fig. 2-4-2)

③ Pull out the gears S and T from the FL shaft.

(Installation)

① Fix the gear S and T to the FL shaft.

② Install the FL shaft, first the end attached to gear T and then the end with gear S.

③ Follow the installation method in Item 5 to 8 in Para. 2-2.

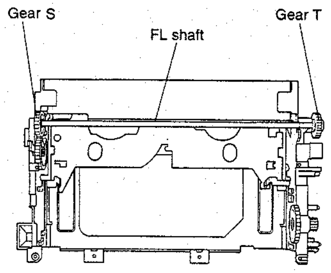


Fig. 2-4-1

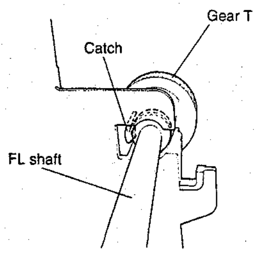


Fig. 2-4-2

## 2-5 Wheel Gear

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Remove the side plate and sense gear.
(Refer to Para. 2-2 for the removal method.)

③ Unfasten the catch shown in Fig. 2-5-1 to remove the wheel gear.

(Installation)

① Install the wheel gear in the position shown in Fig. 2-5-1, from the inside of the cassette housing.

② Install the sens gear and side plate.
(Refer to Para. 2-2 for the installation method.)

③ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

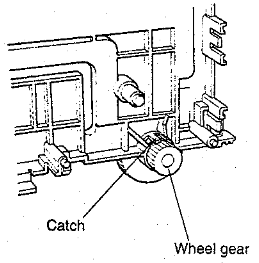


Fig. 2-5-1

## 2-6 Supply Arm and Arm Spring (SP)

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Remove the side plate.
(Refer to Item 2 of Para. 2-2 for the removal method.)

③ Remove the sens gear.
(Refer to Item 3 of Para. 2-2 for the removal method.)

④ Pull the lock levers on both the supply and takeup side, shown in Fig. 2-6-1, in the direction shown by the arrow to shift the bottom plate to the position shown in Fig. 2-6-2.

⑤ Remove the takeup arm.
(Refer to Item 5 of Para. 2-2 for the removal method.)

⑥ Pull part A, fixed to the supply arm, in the direction shown by the arrow to remove the bottom plate.
(Refer to Fig. 2-6-3.)

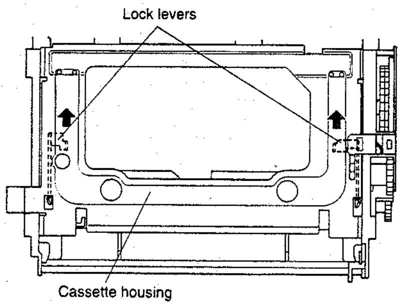


Fig. 2-6-1

⑦ Turn the supply arm in the direction shown by the arrow to shift part B, shown in Fig. 2-6-4, so that it aligns with the catch. Unfasten the catch to remove the supply arm.

⑧ Detach the arm spring from the supply arm as shown in Fig. 2-6-5.

(Installation)

① Attach the arm spring to the supply arm as shown in Fig. 2-6-5.

② Install the supply arm in the position shown in Fig. 2-6-4. (Align the catch with the part B of the supply arm.)

③ Insert the bottom plate so part A enters between the supply arm and the supply spring as shown in Fig. 2-6-3. Then install the bottom plate so that part C is in the position shown in Fig. 2-6-6.

④ Follow the installation method in Item ⑤ to ⑧ in Para. 2-2.

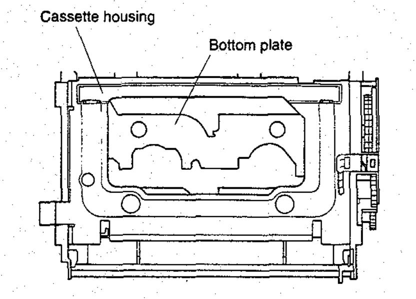

Cassette housing
Bottom plate

Fig. 2-6-2

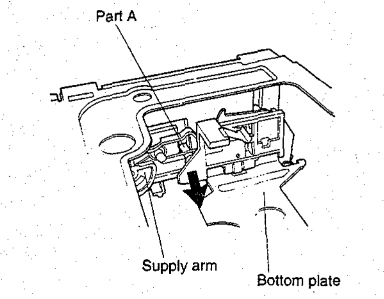

Part A
Supply arm
Bottom plate

Fig. 2-6-3

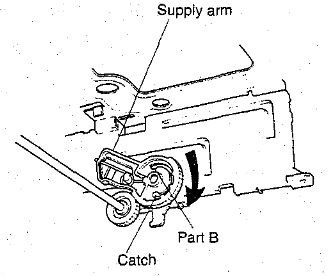

Supply arm
Part B
Catch

Fig. 2-6-4

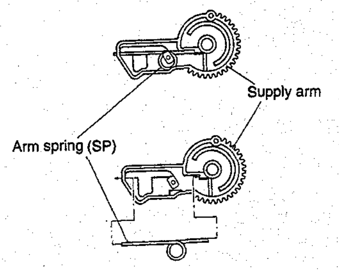

Supply arm
Arm spring (SP)

Fig. 2-6-5

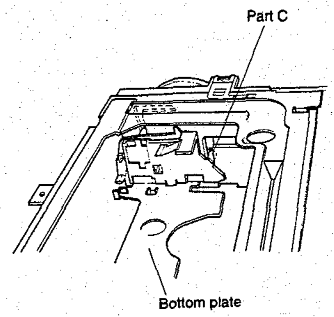

Part C
Bottom plate

Fig. 2-6-6

## 2-7 Jut

(Removal)

① Follow the removal method in Items ① to ⑥ of Para. 2-6.

② Unfasten the four catches (ⓐ, ⓑ, ⓒ and ⓓ) shown in Fig. 2-7-1 to remove the jut and the jut spring.

(Installation)

① Install the jut and the jut spring as shown in Fig. 2-7-1. (Insert the jut spring into the part A of the jut before installing the jut. Hook one end of the jut spring with the outside of the catch (ⓐ) and the other end with part B of the jut.)

② Install the bottom plate according to the installation method in ③ of Para. 2-6.

③ Follow the installation method in Items ⑤ to ⑧ in Para. 2-2.

## 2-8 PCB-HA/AUDIO

(Removal)

① Unfasten the hook and raise the head amp shield cover shown in Fig. 2-8-1 to remove it.

② Unsolder the terminals of the mode switch, the drum motor, and the rotary transformer shown in Fig. 2-8-1.

③ Lift the stopper of the A/C head assembly in Fig. 2-8-4 slightly upward and disconnect the lead connector (bare wire), connecting the PCB-HA/AUDIO and the PCB-A/C-HEAD.

④ Disconnect the lead connector (point A), connected to the FE head. (Refer to Fig. 2-8-2.)

⑤ Reverse the deck and disconnect the lead card, connecting the PCB of the capstan motor and the PCB-HA/AUDIO. (Refer to Fig. 2-8-3.)

⑥ Remove the three screws (ⓐ, ⓑ and ⓒ) and slowly pull the PCB-HA/AUDIO in the direction shown by the arrows. (Refer to Fig. 2-8-1.)

(Installation)

① Insert the terminals of the mode switch, the drum motor, and the rotary transformer, and the boss, adjacent to the mode switch, in the matching holes on the PCB-HA/AUDIO and secure the PCB-HA/AUDIO with the three screws (ⓐ, ⓑ and ⓒ) in the order, ⓑ→ⓒ→ⓐ. (Refer to Fig. 2-8-1)

② Solder the pins mentioned in Item ①.

③ Reverse the deck and reconnect the lead card connecting the PCB of the capstan motor and the PCB-HA/AUDIO. (Refer to Fig. 2-8-3) Take care not to fit lead card upside down.

④ Connect the lead connector, connected to the FE head, to the point A. (Refer to Fig. 2-8-2.)

⑤ Shift part B of the bare wire lead extended from the head amp slightly downward, lower the stopper, and connect it to the connector on the PCB-A/C-HEAD. (Refer to Fig. 2-8-4)

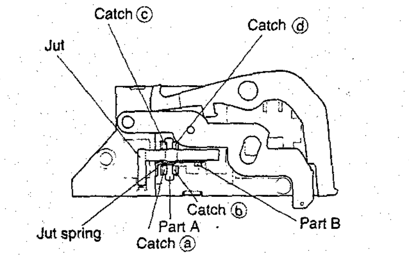

Catch ⓒ
Catch ⓓ
Jut
Catch ⓑ
Part A
Part B
Jut spring
Catch ⓐ

Fig. 2-7-1

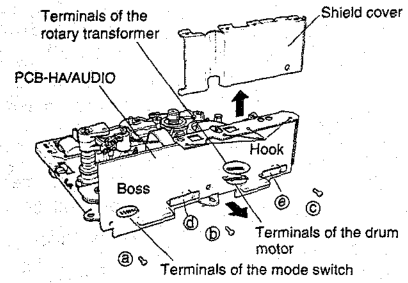

Terminals of the rotary transformer
Shield cover
PCB-HA/AUDIO
Hook
Boss
ⓒ
ⓓ
ⓑ
Terminals of the drum motor
ⓐ
Terminals of the mode switch

Fig. 2-8-1

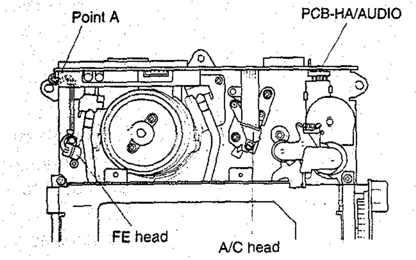

Point A
PCB-HA/AUDIO
FE head
A/C head

Fig. 2-8-2

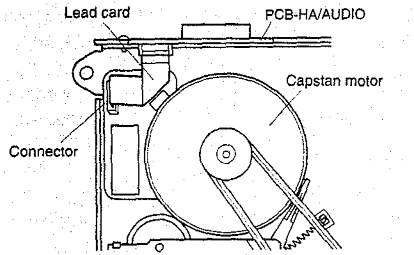

Lead card
PCB-HA/AUDIO
Capstan motor
Connector

Fig. 2-8-3

## 2-9 Brush (Refer to the Fig.2-9-1.)

(Removal)

① Reverse the deck and remove the three screws (ⓐ, ⓑ and ⓒ) to remove the brush.

(Installation)

① Attach the brush on the position shown in Fig. 2-9-1 and secure it with the screws ⓐ and ⓑ. Tighten screw ⓒ.

## 2-10 Drum Assembly

**Note:** When removing and installing the drum assembly, do not touch the tape running surface with your hands.

**Note:** Take care not to bend the PCB-HA/AUDIO.

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Remove the PCB-HA/AUDIO. (Refer to Para. 2-8 for the removal method.)

③ Unscrew the three screws (ⓐ, ⓑ and ⓒ) on the reverse side of the deck and remove the drum assembly. (Refer to Fig. 2-10-1.)

④ Slowly raise the drum assembly upward, take care not to touch other parts around it. (Do not touch the tape running surface of the drum with your hand.)

**Note:** During removal, support the drum assembly when it is not secured by fastening screws.

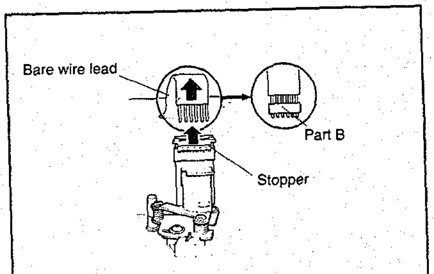

Bare wire lead
Part B
Stopper

Fig. 2-8-4

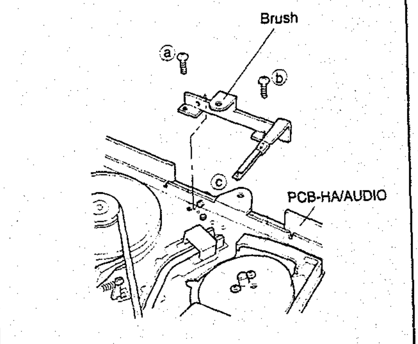

Brush
ⓐ
ⓑ
ⓒ
PCB-HA/AUDIO

Fig. 2-9-1

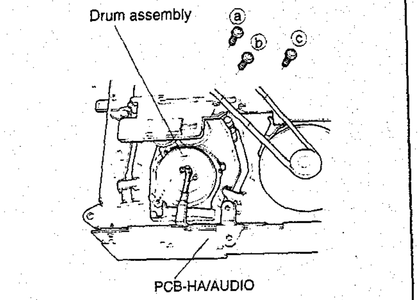

Drum assembly
ⓐ
ⓑ
ⓒ
PCB-HA/AUDIO

Fig. 2-10-1

(Installation)

① Carefully place the new drum assembly on the main plate of the deck, take care not to touch other parts.

② Holding the drum assembly, reverse the deck and secure the drum assembly with the three screws (ⓐ, ⓑ and ⓒ). (Tighten the screws in the order ⓐ→ⓑ→ⓒ and finally tighten again ⓐ.) (Refer to Fig. 2-10-1.)

③ Install the PCB-HA/AUDIO.
(Refer to Para. 2-8 for the installation method.)

④ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

**[Another Method]**

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Unsolder the soldered pins on the terminal of the drum assembly and the terminal of the rotary transformer. (Refer to Fig. 2-10-2)

③ Unscrew the three screws (ⓐ, ⓑ and ⓒ) on the reverse side of the deck and remove the drum assembly. (Refer to Fig. 2-10-1.)

④ Slightly raise the drum assembly in the opposite direction of the pins. Remove the pins of the drum assembly and of the rotary transformer from the PCB-HA/AUDIO. Slowly remove the drum assembly, take care not to touch other parts around it.

(Installation)

① Carefully place the drum assembly on the main plate, take care not to touch the other parts around it. The pins of the drum assembly and the rotary transformer must enter the holes of the PCB-HA/AUDIO.

② Secure the drum assembly with the three screws (ⓐ, ⓑ and ⓒ) on the reverse side of the deck. (Tighten the screws in the order ⓐ→ⓑ→ⓒ and finally tighten ⓐ again.) (Refer to Fig. 2-10-1.)

③ Solder the pins of the drum assembly and the rotary transformer. (Refer to Fig. 2-10-2.)

④ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

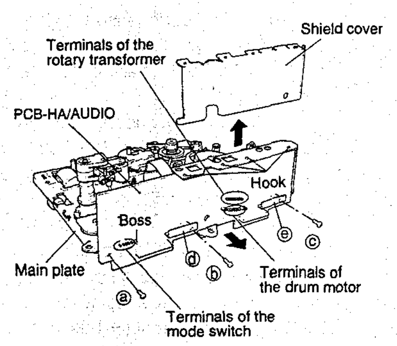

Terminals of the rotary transformer
Shield cover
PCB-HA/AUDIO
Hook
Boss
ⓔ
ⓒ
Main plate
ⓓ
ⓑ
Terminals of the drum motor
ⓐ
Terminals of the mode switch

Fig. 2-10-2

## 2-11 Upper Drum and Drum Motor

**Note:** When only the upper drum is to be replaced, follow the procedure of Items ②~④ of the removal method and ②~④ of the installation method.

(Removal)

① Remove the drum assembly.
(Refer to Para. 2-10 for the removal method.)

② Unsolder the terminals of each head on the upper drum.

③ Remove the screws holding the upper drum shown in Fig. 2-11-1.

④ Remove the upper drum slowly and carefully.

⑤ Remove the screws (ⓐ and ⓑ) shown in Fig. 2-11-1 to remove the rotor case and damper. Remove the screws (ⓒ, ⓓ and ⓔ) to remove the drum motor.

(Installation)

**Note:** Handle the upper drum carefully as the video heads are fragile.

① Attach the rotary transformer and the drum motor so that the terminals of both face in the same direction, and secure them with the screws (ⓒ, ⓓ and ⓔ).
Secure the rotor case with the screws (ⓐ and ⓑ).

② Position the white painted (shaded) area of the upper drum so that the area is 90° apart from the hole of the lower dram shaft. Insert the upper drum. Take care not to touch the head terminals. [Fig. 2-11-2]

③ Secure the upper drum with the two fastening screws. (Tighten the screws alternately.)

④ Solder the terminals of each head.

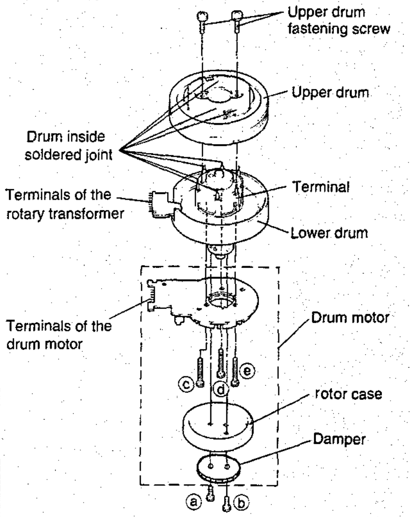

Upper drum fastening screw
Upper drum
Drum inside soldered joint
Terminal
Terminals of the rotary transformer
Lower drum
Terminals of the drum motor
Drum motor
ⓒ
ⓓ
ⓔ
rotor case
Damper
ⓐ
ⓑ

Fig. 2-11-1

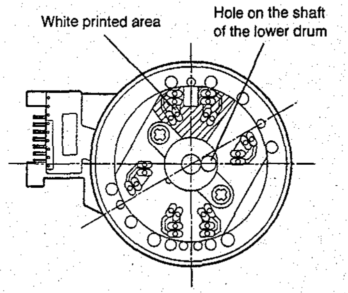

White printed area
Hole on the shaft of the lower drum

Fig. 2-11-2

## 2-12 Safety Spring and Safety Lever

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Unhook the safety spring with a tweezers.
③ Turn the safety lever clockwise and remove by raising it upward as shown in Fig. 2-12-2.

(Installation)

① Install the safety lever so that part A aligns with the hole on the main plate, shown in Fig. 2-12-1, and part B with the hole of the safety arm on the reverse side of the deck.
② Fix the safety spring to the shaft of the safety lever and hook it as shown in Fig. 2-12-3.
③ Install the cassette housing.(Refer to Para. 2-1 for the installation method.)

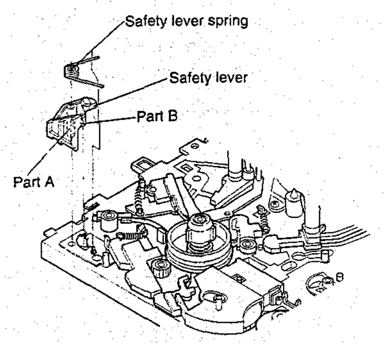

Safety lever spring
Safety lever
Part B
Part A

Fig. 2-12-1

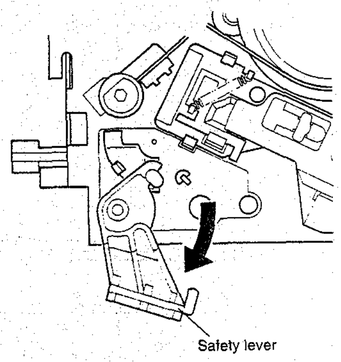

Safety lever

Fig. 2-12-2

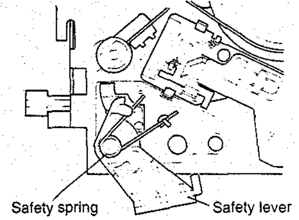

Safety spring
Safety lever

Fig. 2-12-3

## 2-13 Safety Arm

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Remove the safety spring and the safety lever. (Refer to Para. 2-12 for the removal method.)
③ Unfasten the catch to remove the safety arm. (Refer to Fig. 2-13-1).

(Installation)

① Reverse the deck and fix the safety arm to the shaft of the main plate so that its catch is within the range shown in Fig. 2-13-2.
② Install the safety spring and the safety lever. (Refer to Para. 2-12 for the installation method.)
③ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

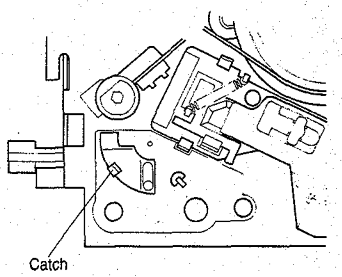


Fig. 2-13-1

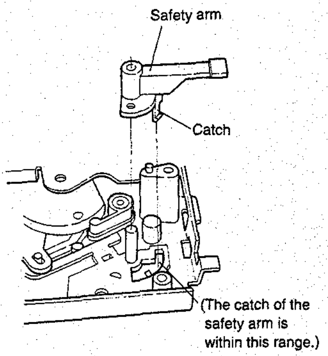

Safety arm
Catch
(The catch of the safety arm is within this range.)

Fig. 2-13-2

## 2-14 Sub Brake(SP) and Sub Spring(SP)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Detach the sub spring(SP).
③ Reverse the deck and unfasten the catch with a small screw driver, etc., to remove the sub brake(SP) as shown in Fig. 2-14-2.

(Installation)

① Install the sub brake(SP) with care not to score the tension brake belt(without loosening of the tension brake belt).(Refer to Fig. 2-14-1)
② Attach the sub spring(SP).
③ Install the cassette housing.(Refer to Para. 2-1 for the installation method.)

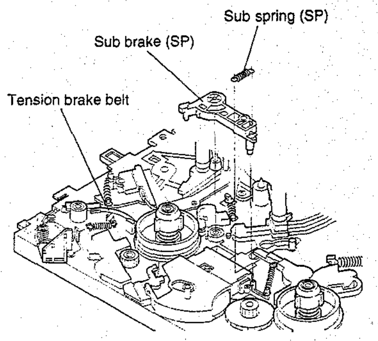

Sub spring (SP)
Sub brake (SP)
Tension brake belt

Fig. 2-14-1

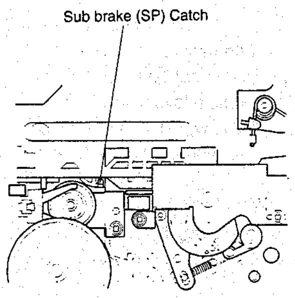

Sub brake (SP) Catch

Fig. 2-14-2

## 2-15 Main Brake (SP) and Main Brake Spring J(SP) (Refer to Fig. 2-15-1.)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)

③ Unhook the main brake spring J(SP).

④ Raise the main brake(SP) upward to remove it.

(Installation)

① Install the main brake(SP) on the main plate and attach the main brake spring J(SP).

② Install the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the installation method.)

③ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

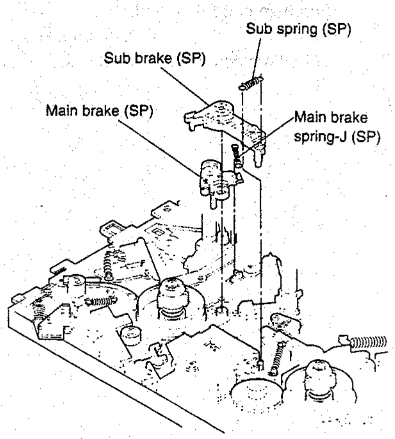

Sub spring (SP)
Sub brake (SP)
Main brake (SP)
Main brake spring-J (SP)

Fig. 2-15-1

## 2-16 Sub Off Lever, Sub Brake (TU), and Sub Spring (TU)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Remove the sub brake (SP) and the sub spring (SP). (Refer to Para. 2-14 for the removal method.)

③ Unfasten the catch with a small screw driver, etc., and raise the sub off lever upward to remove it. (Refer to Fig. 2-16-2)

④ Remove the sub spring (TU). (Refer to Fig. 2-16-1.)

⑤ Unfasten the catch with a small screw driver, etc., and raise the sub brake (TU) upward to remove it as shown in Fig. 2-16-2.

(Installation)

① Apply the grease (PG-641)[859D055030] to the area shown in Fig. 2-16-3.

② Install the sub brake (TU) on the main plate.

③ Install the sub off lever so that the hole A aligns with the boss of the sub brake (TU) as shown in Fig. 2-16-1.

④ Install the sub spring (TU).

⑤ Install the sub brake (SP) and the sub spring (SP). (Refer to Para. 2-14 for the installation method.)

⑥ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

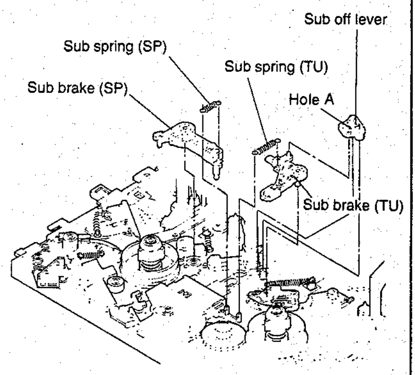

Sub off lever
Sub spring (SP)
Sub spring (TU)
Sub brake (SP)
Hole A
Sub brake (TU)

Fig. 2-16-1

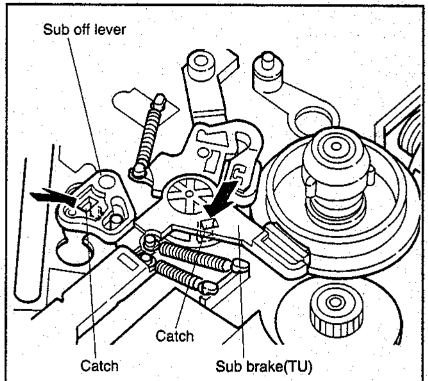

Sub off lever
Catch
Catch
Sub brake(TU)

Fig. 2-16-2

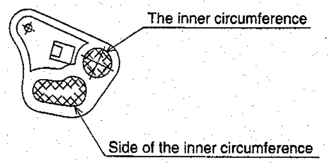

The inner circumference
Side of the inner circumference

Fig. 2-16-3

## 2-17 Main Brake(TU) and Main Brake Spring J(TU)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)

③ Remove the sub off lever, the sub brake(TU), and the sub spring(TU). (Refer to Para. 2-16 for the removal method.)

④ Remove the main brake spring J(TU) and raise the main brake(TU) upward to remove it. (Refer to Fig. 2-17-1.)

(Installation)

① Install the main brake(TU) on the main plate assembly so that the coupling portion with the main brake release lever is as shown in Fig. 2-17-2.

② Install the main brake spring J(TU).

③ Install the sub brake(TU), the sub off lever, and the sub spring(TU). (Refer to Para. 2-16 for the installation method.)

④ Install the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the installation method.)

⑤ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

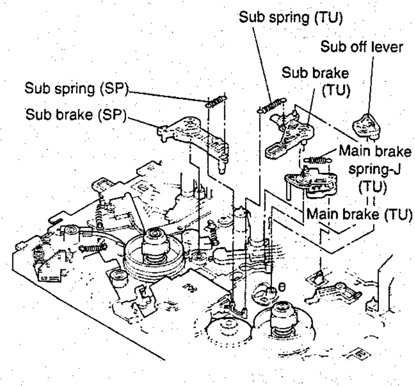

Sub spring (TU)
Sub off lever
Sub brake (TU)
Sub spring (SP)
Sub brake (SP)
Main brake spring-J (TU)
Main brake (TU)

Fig. 2-17-1

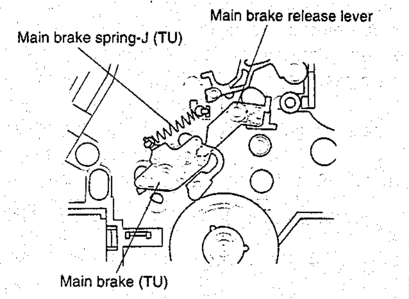

Main brake release lever
Main brake spring-J (TU)
Main brake (TU)

Fig.2-17-2

## 2-18 ID Swing Lever, Revolution Lever, and Revolution Spring

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Reverse the deck and remove the grip ring attached to the shaft G of the charge assembly.

③ Unfasten the two catches(A, B) to remove the charge assembly.

④ Remove the revolution spring with a tweezers.

⑤ Slide the revolution lever in the direction shown by the arrow and unfasten it from the catch C of the ID swing lever.(Refer to Fig. 2-18-1)

⑥ Detach the charge spring from the ID swing lever.

(Installation)

① Apply the grease(PG-641)[859D055030] to the areas shown in Fig. 2-18-2 of the new revolution lever and the ID swing lever.

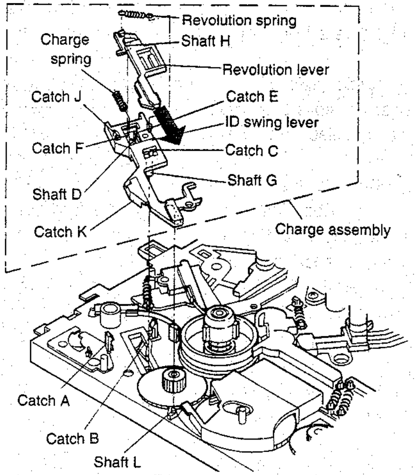

Revolution spring
Charge spring
Shaft H
Revolution lever
Catch J
Catch E
ID swing lever
Catch F
Catch C
Shaft G
Shaft D
Catch K
Charge assembly
Catch A
Catch B
Shaft L

Fig. 2-18-1

② Fix the charge spring to shaft D of the ID swing lever and compress it to hook its ends with the catches E and F.(Refer to Fig. 2-18-1)

**Note:** The charge spring should be installed in the directions shown below.

**(Longitudinal Direction)**

The bent tip is attached on the shaft D.

**(Traverse Direction)**

The wider semicircle is on the left as shown in Fig. 2-18-1.

③ Align the shaft H of the revolution lever with the position shown in Fig. 2-18-1. Insert catch C of the ID swing lever into the hole of the revolution lever, pushing the charge spring with a revolution lever in the direction shown by the arrow. At the same time, hook the ends of the revolution lever with the catches J and K.

④ Attach the revolution spring with a tweezers.

⑤ Install the charge assembly so that shaft G enters into the oval hole of the charge lever on the reverse side of the deck and the groove of the charge assembly fits the shaft as shown in Fig. 2-18-1. Secure the charge assembly with the catch A and B.

⑥ Reverse the deck and fix the new grip ring to the shaft G of the charge assembly.

⑦ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

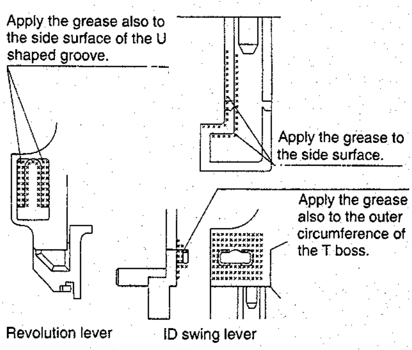

Apply the grease also to the side surface of the U shaped groove.
Apply the grease to the side surface.
Apply the grease also to the outer circumference of the T boss.
Revolution lever
ID swing lever

Fig. 2-18-2

## 2-19 Tension Arm, Tension Brake Belt, and Tension Spring

**Note:** During removal and installation, take care not to change the shape of the tension brake belt.

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for removal method.)

② Supply a voltage(approximately 5V DC plus voltage on the red wire) to the loading motor and slide the tape guide assembly completely to the loaded position,to set it to the loaded position.

③ Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)

④ Unfasten the catch of the part A on the tension brake belt and raise the part A to unfasten the tension brake belt from the supply reel disk.(Refer to Fig. 2-19-1)

⑤ Remove the tension spring, unfasten the catch shown in Fig. 2-19-2, and raise the tension arm upward to remove it.

⑥ Reverse the tension arm, unfasten the catch with a tweezers as shown in Fig. 2-19-3 to remove the tension brake belt.

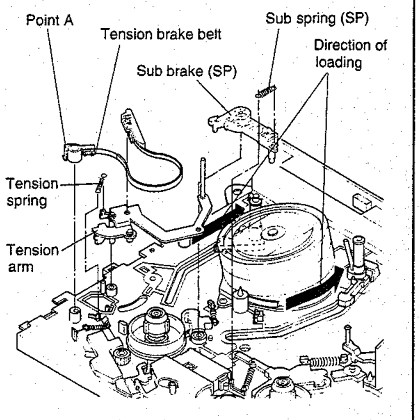

Point A
Tension brake belt
Sub spring (SP)
Direction of loading
Sub brake (SP)
Tension spring
Tension arm

Fig. 2-19-1

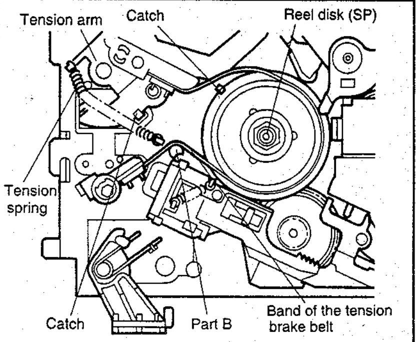

Tension arm
Catch
Reel disk (SP)
Tension spring
Catch
Part B
Band of the tension brake belt

Fig. 2-19-2

(Installation)

① Insert the catch in the position of the tension arm as shown in Fig. 2-19-3 to fasten the tension brake belt on the tension arm. (Take care not to let projection C, next to the catch of the tension brake belt touch the tension arm.)

② Install the tension arm, where the tension brake belt is fastened, on the main plate.

③ Fasten the tension brake belt around the supply reel disk. (The band of the tension brake belt must pass the outside of the catch shown in Fig. 2-19-2 and inside of the part B.)

④ Attach the tension spring.

⑤ Install the sub brake(SP) and sub spring(SP). (Refer to Para. 2-14 for the installation method.)

⑥ Supply voltage(approximately 5V), reversing the polarity used in ② of the Removal method, to set the motor to the unloaded position.

⑦ Make sure that the holes (matching mark M) on the body and cogwheel of the mode switch align with each other as shown in Fig. 2-19-4. At the same time confirm that the hole of the gear pinch aligns with the matching marks of the gear joint J and the ▽mark on the mode switch cogwheel,refer to Fig. 2-19-5. This indicates the J deck is in the EJECT mode.

⑧ If the deck is not completely set to the eject mode, turn part D of the pulley worm J by hand to set the eject mode.

Turn in the direction a •••••• for loading
Turn in the direction b •••••• for unloading
(Refer to Fig. 2-19-6)

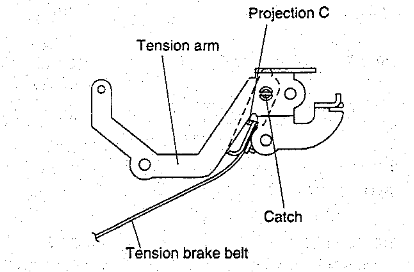

Projection C
Tension arm
Catch
Tension brake belt

Fig. 2-19-3

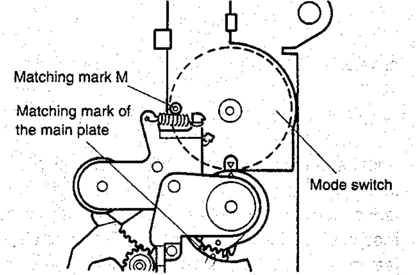

Matching mark M
Matching mark of the main plate
Mode switch

Fig. 2-19-4

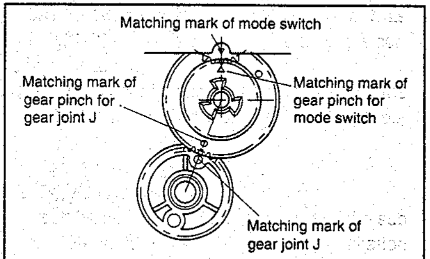

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 2-19-5

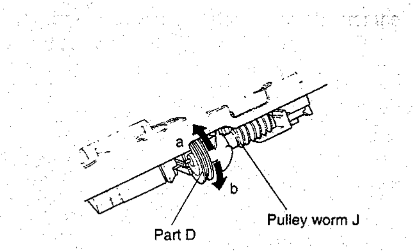

a
b
Part D
Pulley worm J

Fig. 2-19-6

## 2-20 Takeup Reel Disk and Gear R(takeup side)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)

② Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)

③ Remove the sub off lever, the sub brake(TU), and the sub spring(TU). (Refer to Para. 2-16 for the removal method.)

④ Unfasten the catch shown in Fig. 2-20-1 and raise the takeup reel disk upward to remove it from the shaft.

⑤ Raise the gear R(takeup side) upward to remove it from the shaft. (Refer to Fig. 2-20-2.)

(Installation)

① Install the gear R(takeup side) on the shaft. (Refer to Fig. 2-20-2.)

② Install the takeup reel disk on the shaft.(Refer to Fig. 2-20-2)

③ Install the height adjusting jig [master plane](used for F deck: Part No.859C342020) in the specified position. (Insert the jig into hole A, shown in Fig. 2-20-3, so that the jig sets on part B and the end of part C. Take care that the jig does not touch the supply and takeup reel disks.)

④ Place the height adjusting jig [square](used for E deck: Part No.859C341070) on the jig installed in Item ③ as shown in Fig. 2-20-4. Make sure that the height is correct (between A and B).

⑤ Adjust the height of the supply reel disk by varying the number of the washers (Part No.552C017020) under the disk.
A) If it is high, remove washer(s).
B) If it is low, add washer(s).

⑥ Install the sub brake(TU), the sub off lever, and the sub spring(TU). (Refer to Para. 2-16 for the installation method.)

⑦ Install the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the installation method.)

⑧ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

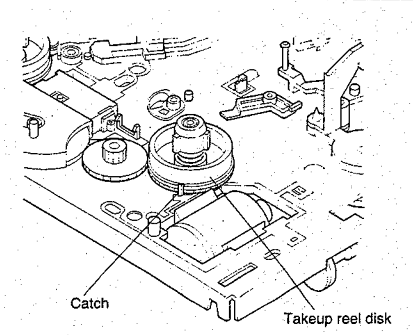

Catch
Takeup reel disk

Fig. 2-20-1

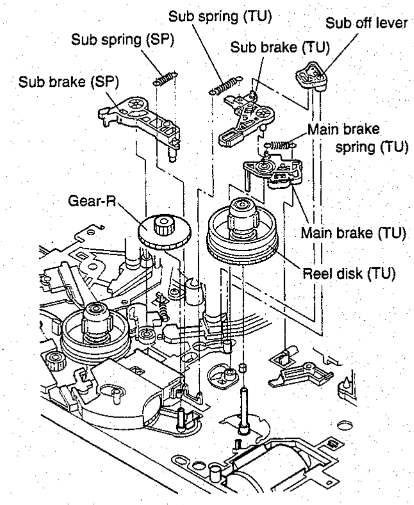

Sub spring (TU)
Sub off lever
Sub spring (SP)
Sub brake (TU)
Sub brake (SP)
Main brake spring (TU)
Gear-R
Main brake (TU)
Reel disk (TU)

Fig. 2-20-2

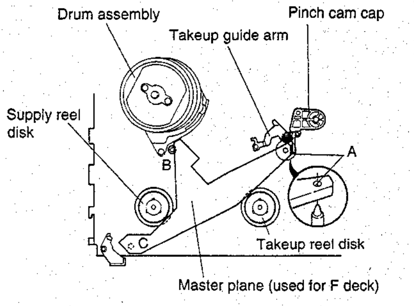

Drum assembly
Pinch cam cap
Takeup guide arm
Supply reel disk
B
A
C
Takeup reel disk
Master plane (used for F deck)

Fig. 2-20-3

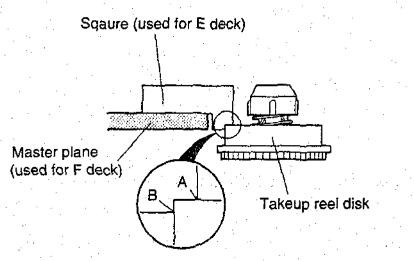

Sqaure (used for E deck)
Master plane
(used for F deck)
A
B
Takeup reel disk

Fig. 2-20-4

## 2-21 Supply Reel Disk

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.
③ Raise the part B of the tension brake belt upward to unfasten the belt from the supply reel disk as shown in Fig. 2-21-2. (Refer to Para. 2-19 for the removal method.)
④ Unfasten the catch shown in Fig. 2-21-1 and raise the supply reel disk upward to remove it from the shaft.

(Installation)

① Install the supply reel disk on the shaft.
② Install the height adjusting jig [master plane](used for F deck: Part No.859C342020) in the specified position. (Insert the jig into the hole A shown in Fig. 2-20-3 so that the jig sets on part B and the end of part C. Take care that the jig does not touch the supply and takeup reel disks.)
③ Place the height adjusting jig [square](used for E deck: Part No.859C341070) on the jig, previously installed placed in Item ④, as shown in Fig. 2-21-3. Make sure that the height is correct (between A and B).
④ Adjust the height of the supply reel disk by varying the number of the washers(Part No.552C017O20) under the disk.
A) If it is high, remove washer(s).
B) If it is low, add washer(s).

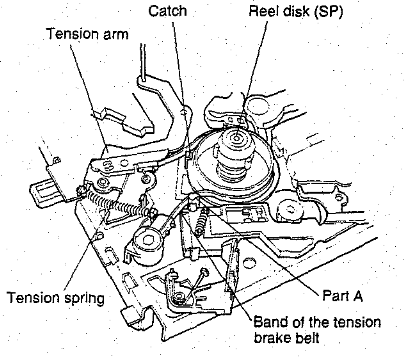

Catch
Reel disk (SP)
Tension arm
Tension spring
Part A
Band of the tension brake belt

Fig. 2-21-1

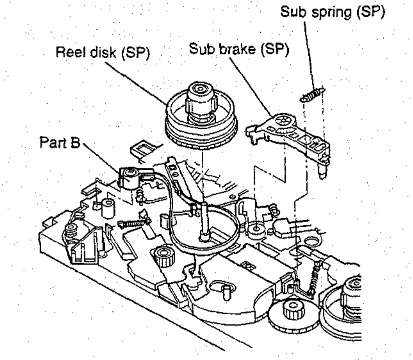

Sub spring (SP)
Reel disk (SP)
Sub brake (SP)
Part B

Fig. 2-21-2

⑤ Fasten the tension brake belt round on the supply reel disk, taking care not to score the belt and route part B of the tension brake belt as shown in Fig. 2-21-2. (Refer to Para. 2-19 for the installation method.) (The band of the tension brake belt must pass outside of the catch shown in Fig. 2-21-1 and inside of the part A.)
⑥ Install the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the installation method.)
⑦ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

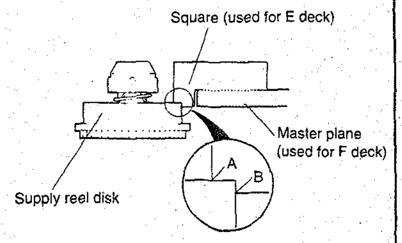

Square (used for E deck)
Master plane
(used for F deck)
Supply reel disk
A
B

Fig. 2-21-3

## 2-22 Gear R(supply side) (Refer to Fig. 2-22-1.)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Remove the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)
③ Unfasten the tension brake belt from the supply reel disk and remove the supply reel disk. (Refer to Para. 2-21 for the removal method.)
④ Remove the charge assembly. (Refer to item ② of Removal in Para. 2-18 for the removal method.)
⑤ Raise the gear R(SP) upward to remove it from the shaft.

(Installation)

① Install the gear R(SP) on the shaft.
② Install the supply reel disk. (Refer to Para. 2-21 for the installation method.)
③ Install sub brake(SP) and sub spring(SP). (Refer to Para. 2-14 for the installation method.)
④ Install the charge assembly. (Refer to Item ⑤ of Para. 2-18 for the installation method.)
⑤ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

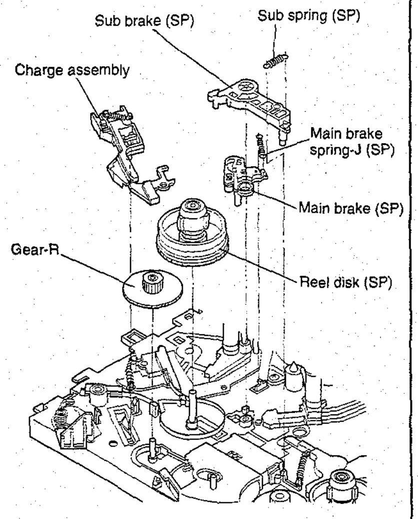

Sub brake (SP)
Sub spring (SP)
Charge assembly
Main brake spring-J (SP)
Main brake (SP)
Gear-R
Reel disk (SP)

Fig. 2-22-1

## 2-23 Main Brake Release Lever (Refer to Fig. 2-23-1.)

(Removal)

① Remove the cassette housing. (Refer to Para. 2-1 for the removal method.)
② Remove the sub brake(SP), and the sub spring(SP). (Refer to Para. 2-14 for the removal method.)
③ Remove the sub off lever, the sub brake(TU), and the sub spring(SP). (Refer to Para. 2-16 for the removal method.)
④ Remove the main brake(TU) and the main brake spring J(TU). (Refer to Para. 2-17 for the removal method.)
⑤ Shift catch A of the main brake release lever, and push catch B at the same time, in the direction shown by each arrow. Unfasten catch B from the main plate to remove the main brake release lever. (Refer to Fig. 2-23-2).

(Installation)

① Install the main brake release lever so that the shaft enters the inside groove shown in Fig. 2-23-3 of the main gear J.
② Install the main brake(TU) and the main brake spring J(TU). (Refer to Para. 2-17 for the installation method.)
③ Install the sub brake(TU), the sub off lever, and the sub spring(TU). (Refer to Para. 2-16 for the installation method.)
④ Install the sub brake(SP) and the sub spring(SP). (Refer to Para. 2-14 for the installation method.)
⑤ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

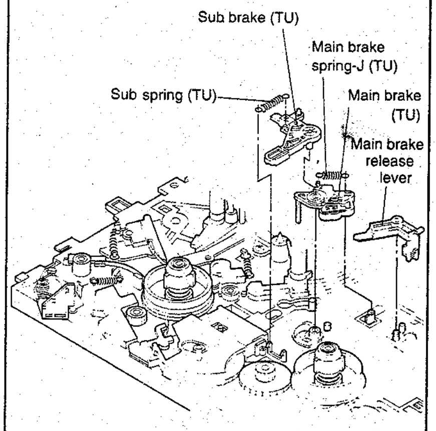

Sub brake (TU)
Main brake spring-J (TU)
Sub spring (TU)
Main brake (TU)
Main brake release lever

Fig. 2-23-1

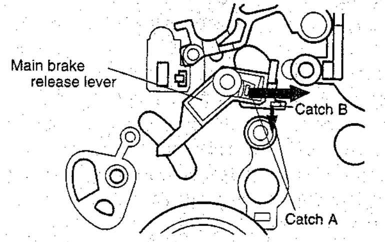

Main brake release lever
Catch B
Catch A

Fig. 2-23-2

Insert the boss of the main brake release lever into the position shown in the figure below of the main gear J.

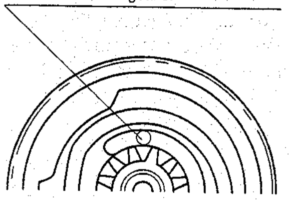


Fig. 2-23-3

## 2-24 Pinch Cam Cap, Pinch Roller Arm Assembly, Pinch Cam, Takeup Guide Gear, Gear Pinch, Takeup Guide Arm, and Takeup Guide Spring

(Removal)

① Unfasten the catch shown in Fig. 2-24-1 and raise the pinch cam cap upward to remove it.
② Raise the pinch roller arm assembly upward to remove it.
③ Raise the pinch cam and the takeup guide gear upward to remove them from the shaft.
④ Unfasten the two catches holding the mode switch and remove the gear pinch from the shaft, lift the mode switch only high enough to remove the gear pinch. (Take care not to break the pins of the mode switch.)
⑤ Remove the nut at the top of the takeup guide arm with a (5.5mm) box screw driver.
⑥ Raise the takeup guide arm upward to remove it.
⑦ Remove the takeup guide spring.

(Installation)

① Hook one end of the takeup guide spring with the takeup guide arm, fix the takeup guide spring to the shaft.
② Apply grease (PG-641) [859D055030] around the top of the new takeup guide arm (the surface which touches with the nut). Fix the takeup guide arm to the shaft, and secure it with the nut. (Set the takeup guide arm to the height shown in Fig. 2-24-2 temporarily.)
③ Lift the mode switch, only high enough to install the gear pinch and place the gear pinch under the mode switch. Fix the mode switch to the shaft so that the matching marks of the gear pinch align with those of the gear joint J and the mode switch as shown in Fig. 2-24-3.
④ Install the takeup guide gear so that the first cog of the takeup guide arm aligns with the matching mark on the takeup guide gear as shown in Fig. 2-24-4.
⑤ Apply grease (G) [859D055050] to the area shown in Fig. 2-24-5 of the new pinch cam.
⑥ Turn the takeup guide arm clockwise while inserting the pinch cam into the gear pinch. Install the pinch cam so that it aligns with the triple catch. (Excessive rotation of the takeup guide arm will keep it from returning, since the takeup guide gear is caught on the pinch roller cam.)
⑦ Apply the grease (PG-641) [859D055030] to the new pinch cam cap on the area shown in Fig. 2-24-7.
⑧ Install the pinch roller arm assembly and the pinch cam cap.

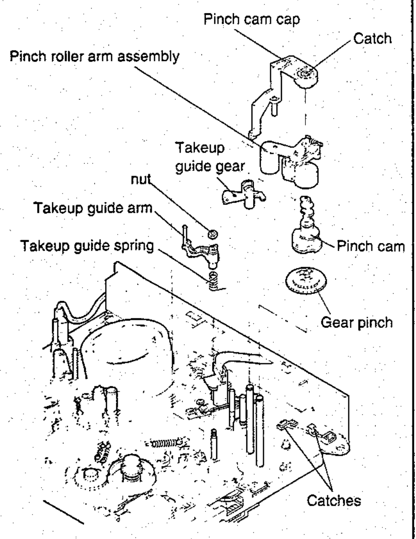

Pinch cam cap
Catch
Pinch roller arm assembly
Takeup guide gear
nut
Takeup guide arm
Takeup guide spring
Pinch cam
Gear pinch
Catches

Fig. 2-24-1

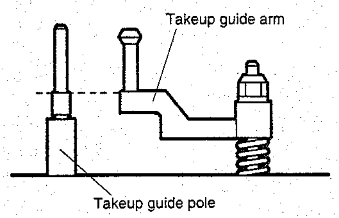

Takeup guide arm
Takeup guide pole

Fig. 2-24-2

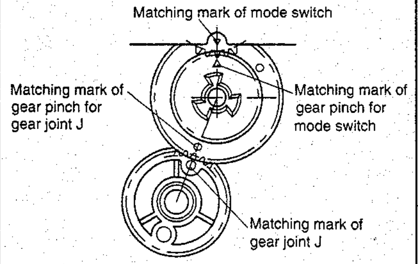

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 2-24-3

**[Adjustment of Takeup Guide Arm Height]**

Adjust the height of the takeup guide arm according to the following procedure.

① Place the height adjusting jig (for the F deck) in the reference position on the main plate (Refer to Fig. 2-20-3). Tighten the takeup guide arm fastening nut so that the lower flange of the takeup guide arm is level with point B of the height adjusting jig (for the E deck). (Refer to Fig. 2-24-6).

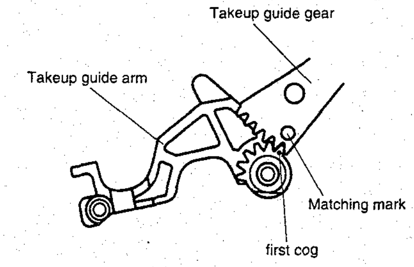

Takeup guide gear
Takeup guide arm
Matching mark
first cog

Fig. 2-24-4

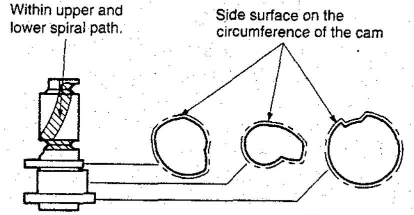

Within upper and lower spiral path.
Side surface on the circumference of the cam

Fig. 2-24-5

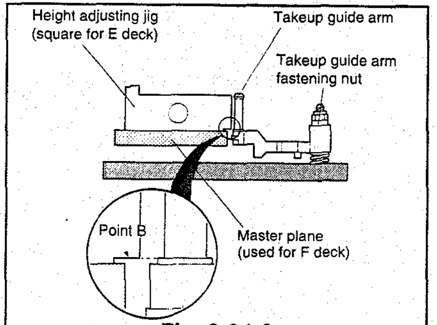

Height adjusting jig (square for E deck)
Takeup guide arm
Takeup guide arm fastening nut
Point B
Master plane (used for F deck)

Fig. 2-24-6

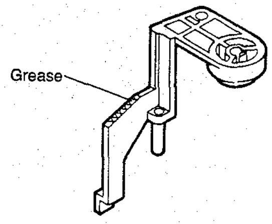


Fig. 2-24-7

## 2-25 Pinch Roller, Roller Cap, Pinch Spring, and Pinch Cam Spring

**Note:** During removal and installation, do not expand the pinch spring more than 18mm and the pinch cam spring more than 27mm.

(Removal)

① Pry the pinch roller and the roller cap to remove them as shown in Fig. 2-25-1.

② Remove the pinch spring and the pinch cam spring.

(Installation)

① Install the pinch cam spring and the pinch spring making sure that the pinch arm, the pinch slider, and the pinch lever are composed as shown in Fig. 2-25-2.

② Install the pinch roller so that the side, with the widest aluminium bushing, is on the roller cap side. Push the roller cap inside to secure the pinch roller.(Refer to Fig. 2-25-3)

**Note:** There are two types of pinch rollers as shown in Fig. 2-25-3. Each should be installed in the direction shown below.

**(Type A)**

The side on which aluminum is wider is attached the roller cap.

**(Type B)**

The convex portion is attached on the roller cap.

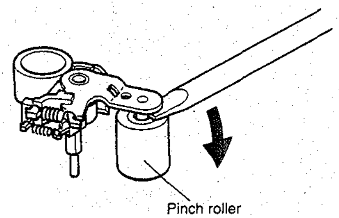

Pinch roller

Fig. 2-25-1

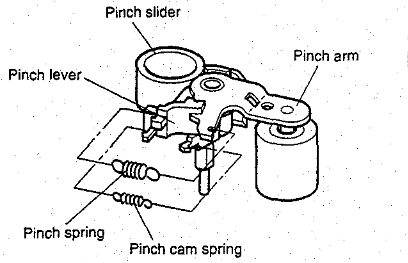

Pinch slider
Pinch arm
Pinch lever
Pinch spring
Pinch cam spring

Fig. 2-25-2

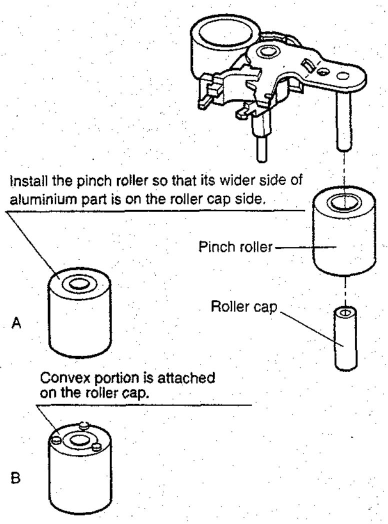

Install the pinch roller so that its wider side of aluminium part is on the roller cap side.
Pinch roller
Roller cap
A
Convex portion is attached on the roller cap.
B

Fig. 2-25-3

## 2-26 Mode Switch

(Removal)

① Remove the pinch cam cap, the pinch roller arm assembly, the pinch cam, and the takeup guide gear.
(Refer to Para. 2-24 for the removal method.)

② Unsolder the five soldered terminals connecting the PCB-HA/AUDIO to the mode switch.
(Refer to Fig. 2-26-1).

③ Unfasten two catches holding the mode switch.
(Refer to Fig. 2-26-2.)

④ Slowly remove the mode switch, making sure that it is completely unsoldered.

(Installation)

① Insert the five pins and the boss of the mode switch shown in Fig. 2-26-1 into the matching holes of the PCB-HA/AUDIO. Place the mode switch on the main plate so that the matching mark of the gear pinch aligns with that of the mode switch and fasten it with the catches as shown in Fig. 2-26-3. (Also make sure that the matching mark of the gear joint aligns with that of the gear pinch.)

② Install the takeup guide gear, the pinch cam, the pinch roller arm assembly, and the pinch cam cap.
(Refer to Para. 2-24 for the installation method.)

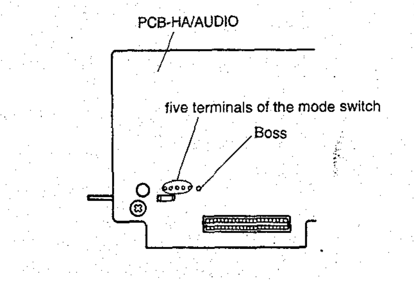

PCB-HA/AUDIO
five terminals of the mode switch
Boss

Fig. 2-26-1

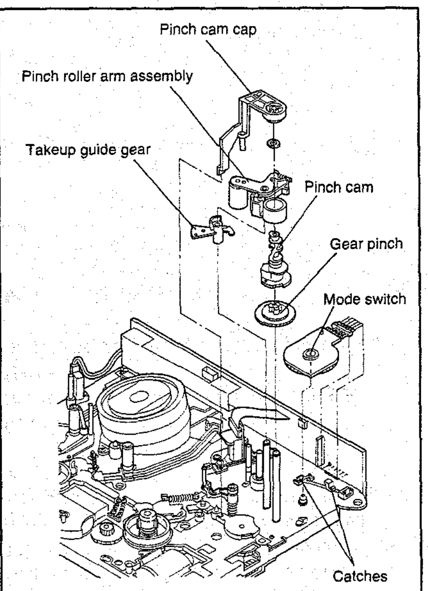

Pinch cam cap
Pinch roller arm assembly
Takeup guide gear
Pinch cam
Gear pinch
Mode switch
Catches

Fig. 2-26-2

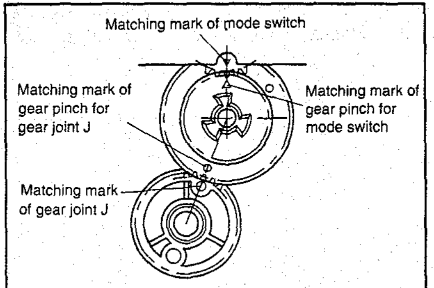

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 2-26-3

## 2-27 FE Head (Refer to Fig. 2-27-1.)

(Removal)

① Disconnect the lead connector, connected to the FE head.

② Remove the screw(ⓐ) to remove the FE head.

(Installation)

① Secure the FE head with the screw(ⓐ) and connect the lead connector to the FE head. (Route the lead connector, which is fastened with the catch as shown in Fig. 2-27-1, through the hook of the main plate.)

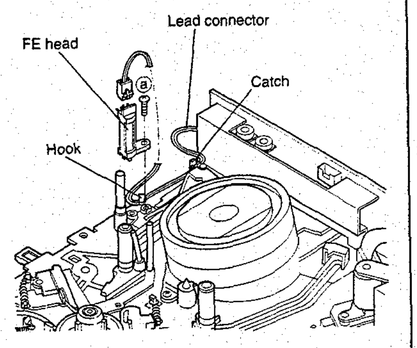

Lead connector
FE head
ⓐ
Catch
Hook

Fig. 2-27-1

## 2-28 Reel Belt and Belt Pulley

(Removal)

① Unfasten the reel belt from the capstan motor and the belt pulley.

② Release the belt pulley as shown in Fig. 2-28-1 and raise the belt pulley upward to remove it.

(Installation)

**Note:** When installing the reel belt, make sure it is clean and free of grease.(Clean with dry gauze only)

① Fasten the belt pulley to the shaft.(When fixing the belt pulley to the shaft of the idler assembly, make sure that the three convex parts of the washer fixed to the shaft enter the matching dents.

② Secure the belt pulley with the new cut washer.

③ Install the reel belt on the capstan motor and the belt pulley, taking care that the belt is not twisted.

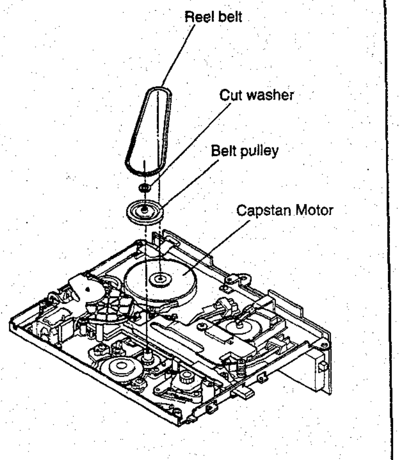

Reel belt
Cut washer
Belt pulley
Capstan Motor

Fig. 2-28-1

## 2-29 Loading Motor Assembly, Pulley Worm J, Loading Motor Belt, and Gear A

(Removal)

① Unfasten the reel belt. (Refer to Para. 2-28 for the removal method.)

② Remove the three screws(ⓐ,ⓑ and ⓒ) as shown in Fig. 2-29-2 and unfasten the three catches to remove the loading motor assembly (which holds the motor holder ). (Refer to Fig. 2-29-1)

③ Remove the loading motor belt from the motor pulley. (Refer to Fig. 2-29-3.)

④ Unfasten the catches holding the motor holder to remove the loading motor assembly.
(Refer to Fig. 2-29-3.)

⑤ Remove the pulley worm J, first the end attached to the part A shown in Fig. 2-29-3 and then the other end.

⑥ Remove the cut washer and unfasten the catch holding Gear A. Remove Gear A.

⑦ Pull the motor pulley to remove it from the loading motor.

⑧ Disconnect the wires from the loading motor.

(Installation)

① Solder the leads to the loading motor.(Red lead wire to the positive terminal and white lead wire to the negative terminal.)

② Install the motor pulley on the loading motor so that the space between the loading motor and the outer edge of the motor pulley is 8.5±0.1mm. (Refer to Fig. 2-29-4)

③ Install the loading motor assembly so that the label on it faces part B, shown in Fig. 2-29-3.

④ Apply grease (G)[859D055O50] to the areas shown in Fig. 2-29-4 of the new pulley worm J. Install the pulley worm J, first the end attached to the part C shown in Fig.2-29-3 and then the other end.

⑤ Fix the gear A to the shaft of the motor holder J and secure it with new cut washers.

⑥ Lift the end attached to the part A shown in Fig. 2-29-3 of the pulley worm J. Fasten the loading motor belt on the pulley worm J and the motor pulley, taking care not to twist the belt.

⑦ Install the loading motor assembly(which holds the motor holder) in the position shown in Fig. 2-29-2 and secure it with the three screws(ⓐ,ⓑ and ⓒ).

⑧ Install the loading motor belt. (Refer to Para. 2-28 for the installation method.)

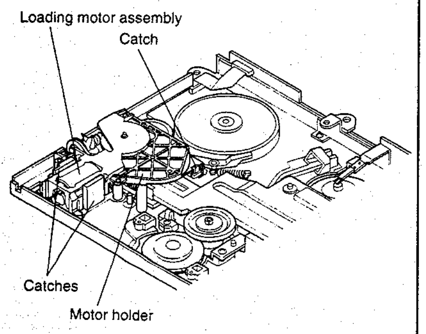

Loading motor assembly
Catch
Catches
Motor holder

Fig. 2-29-1

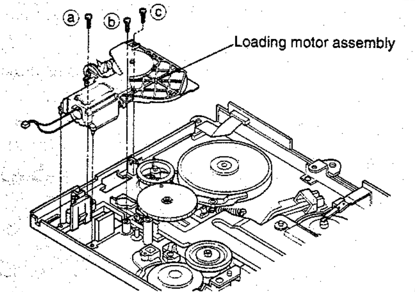

ⓐ
ⓑ
ⓒ
Loading motor assembly

Fig. 2-29-2

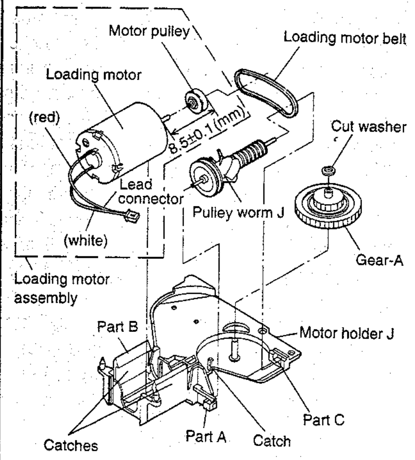

Motor pulley
Loading motor belt
Loading motor
(red)
8.5±0.1(mm)
Cut washer
Lead connector
Pulley worm J
(white)
Gear-A
Loading motor assembly
Part B
Motor holder J
Part C
Catches
Part A
Catch

Fig. 2-29-3

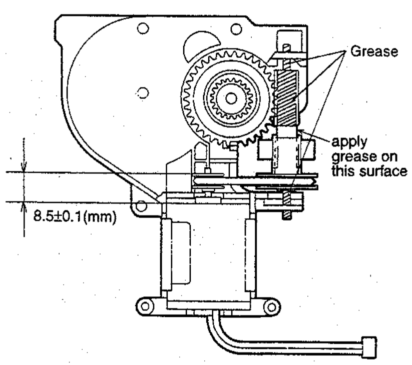

Grease
apply grease on this surface
8.5±0.1(mm)

Fig. 2-29-4

## 2-30 Main Gear J

(Removal)

① Remove the reel belt.
(Refer to Para. 2-28 for the removal method.)

② Remove the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the removal method.)

③ Remove the cut washer mounted on the main gear J.

④ Raise the main gear J upward to remove it.

(Installation)

① Apply grease (G) [859D055O50] to the outside cogs, the groove of the cam and to the inside small cogs of the new main gear J. (Refer to Fig. 2-30-2.)

② Make sure that the cam plate B is set to the right side, viewed from the bottom side of the deck. (Eject mode)

③ Push the axis of the main brake (TU) in the direction shown by the arrow until the main brake release lever moves freely. Turn the deck the right side up and shift the axis of the main brake release lever in the direction shown by the arrow. Then fix the main gear J to the shaft, with the axis of the main brake release lever held in place. Secure the main plate J with the cut washer. (Refer to Fig. 2-30-3) (Insert the pin of the capstan brake in the outside groove of the main gear J and align the matching marks of gear joint J and the main gear J.) (Refer to Fig. 2-30-4)

④ Install the loading motor assembly (which holds the motor holder) and the reel belt.
(Refer to Para. 2-28 for the installation method.)

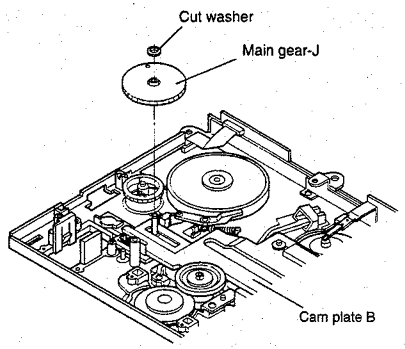

Cut washer
Main gear-J
Cam plate B

Fig. 2-30-1

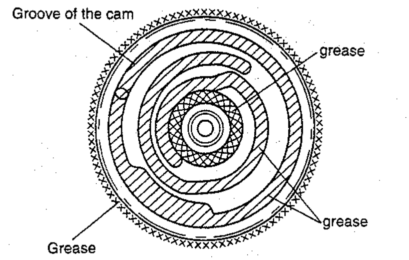

Groove of the cam
grease
grease
Grease

Fig. 2-30-2

## 2-31 Gear Joint J

(Removal)

① Remove the reel belt. (Refer to Para. 2-28 for the removal method.)

② Remove the loading motor assembly (which holds the motor holder). (Refer to Para. 2-29 for the removal method.)

③ Raise the gear joint J upward to remove it. (Refer to Fig. 2-31-1)

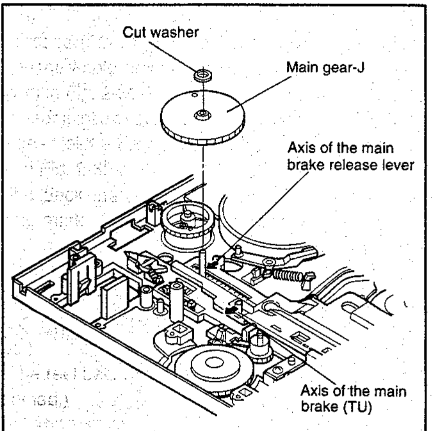

Cut washer
Main gear-J
Axis of the main brake release lever
Axis of the main brake (TU)

Fig. 2-30-3

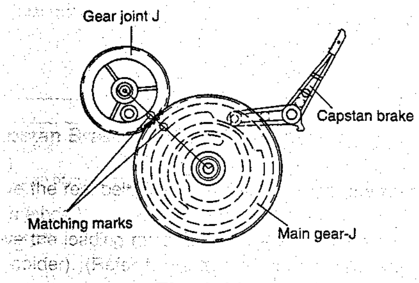

Gear joint J
Capstan brake
Matching marks
Main gear-J

Fig. 2-30-4

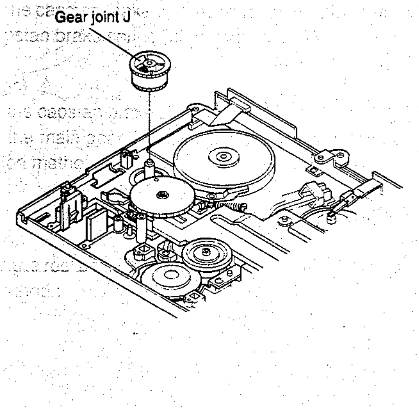

Gear joint J

Fig. 2-31-1

(Installation)

① Apply grease (PG-641)[859D055O30] to the new gear joint J on the whole circumference of the small cogwheel as shown in Fig. 2-31-2.

② Fix the gear joint J to the shaft so that the matching mark of the gear joint J aligns with that of the main gear as shown in Fig. 2-30-4.

③ Turn the deck the right side up, make sure that the matching mark of the gear pinch aligns with that of the gear joint J. (When turning the deck, hold the gear joint J, in place.)(Refer to Fig. 2-31-3)

④ Install the loading motor assembly(which holds the motor holder). (Refer to Para. 2-29 for the installation method.)

⑤ Install the reel belt. (Refer to Para. 2-28 for the installation method.)

## 2-32 Capstan Brake and Capstan Brake Spring

(Removal)

① Remove the reel belt. (Refer to Para. 2-28 for the removal method.)

② Remove the loading motor assembly(which holds the motor holder). (Refer to Para. 2-29 for the removal method.)

③ Remove the main gear J. (Refer to Para. 2-30 for the removal method.)

④ Raise the capstan brake upward to remove it along with the capstan brake spring. (Refer to Fig. 2-32-1.)

(Installation)

① Install the capstan brake and the capstan brake spring.

② Install the main gear J. (Refer to Para. 2-30 for the installation method.)

③ Install the loading motor assembly(which holds the motor holder). (Refer to Para. 2-29 for the installation method.)

④ Fasten the reel belt. (Refer to Para. 2-28 for the installation method.)

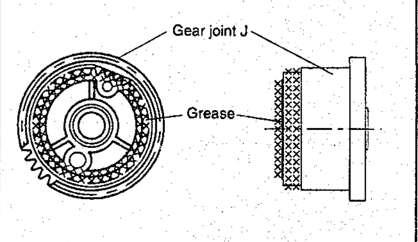

Gear joint J
Grease

Fig. 2-31-2

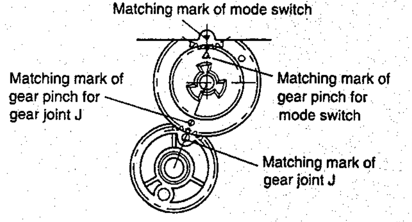

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 2-31-3

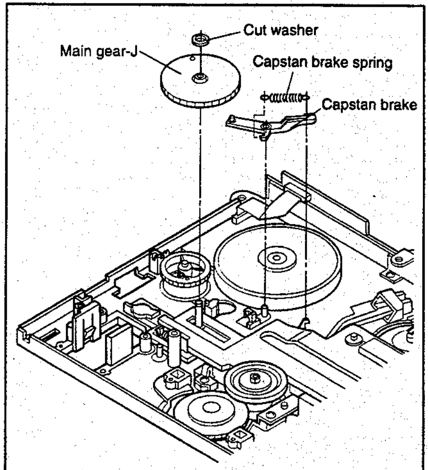

Cut washer
Main gear-J
Capstan brake spring
Capstan brake

Fig. 2-32-1

## 2-33 Plate J, Roller B, and Cam Plate B

(Removal)

① Remove the two screws (ⓐ and ⓑ) to remove the plate J. (Fig. 2-33-1)

② Take off the cut washer fixed to the shaft of the loading arm (TU) to remove the roller B.

③ Remove the reel belt.
(Refer to Para. 2-28 for the removal method.)

④ Remove the belt pulley.
(Refer to Para. 2-28 for the removal method.)

⑤ Remove the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the removal method.)

⑥ Remove the main gear J.
(Refer to Para. 2-30 for the removal method.)

⑦ Slide the cam plate B to the left (the direction shown by the arrow) to remove it.

(Installation)

① Apply grease (G) [859D055O50] to the area shown in Fig. 2-33-2 of the new cam plate B.

② Align the loading arms TU and SP so that the matching marks of the cogs align. (Refer to Fig. 2-37-3)

③ Passing part A of the cam plate B under cam spring B insert it into the hole on the side of the main plate, as shown by the continuous line. (Refer to Fig. 2-33-1)

④ While keeping the rear section of cam plate B raised, align the cam plate B and the cam gear R so that the ○ mark on the cam plate B aligns with the part A on the cam gear R as shown in Fig.2-33-3 (Fig. A). Still keeping the rear of cam plate B raised, slide it to the right until the △ mark on cam plate B and aligns with the part B on the cam gear R, refer Fig. 2-33-3 (Fig. B). From this position lower the rear of the cam plate B unto the already aligned loading gears TU and SP, refer 2 above. Shift the sub off lever and the main brake TU in the directions shown by the arrows to install them. (Refer to Fig. 2-33-1)

⑤ Fix the roller B to the shaft of the loading arm (TU) and secure it with the new cut washer.

⑥ Install the plate J and secure it with the two screws (ⓐ and ⓑ).

⑦ Install the main gear J.
(Refer to Para. 2-30 for the installation method.)

⑧ Install the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the installation method.)

⑨ Install the belt pulley.
(Refer to Para. 2-28 for the installation method.)

⑩ Fasten the reel belt.
(Refer to Para. 2-28 for the installation method.)

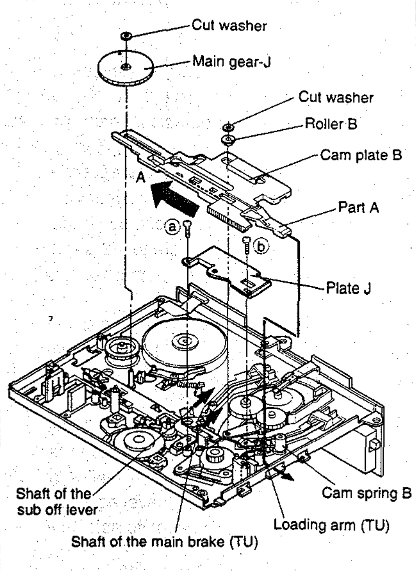


Fig. 2-33-1

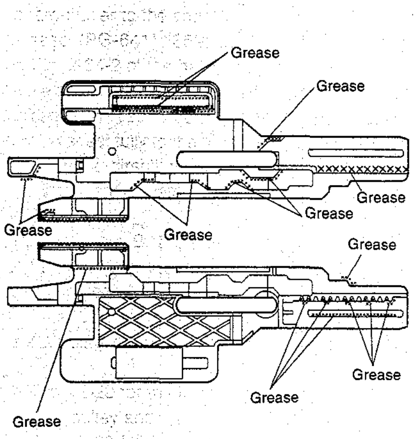


Fig. 2-33-2

## 2-34 Cam Gear R, Charge Lever, and Tension Off Lever

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the installation method.)

② Turn the deck the right side up and detach the tension spring. (Refer to Fig. 2-34-4.)

③ Remove the charge assembly.
(Refer to item ② of Para. 2-18 for the removal method.)

④ Remove the reel belt and the pulley belt.
(Refer to Para. 2-28 for the removal method.)

⑤ Remove the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the removal method.)

⑥ Remove the main gear J.
(Refer to Para. 2-30 for the removal method.)

⑦ Remove the plate J, the roller B, and the cam plate B.
(Refer to Para. 2-33 for the removal method.)

⑧ Raise the cam gear R upward to remove it.
(Refer to Fig. 2-34-1.)

⑨ Remove the charge lever. (Refer to Fig. 2-34-1.)

⑩ Remove the tension off lever. (Refer to Fig. 2-34-1.)

(Installation)

① Let part A pass through part B shown in Fig. 2-34-1 to install the tension off lever.

② Fix the charge lever to the shaft.

③ Apply grease (PG-641) [859D055O30] to the area shown in Fig. 2-34-2 of the new cam gear R.
(The groove and the flank of the outside circumference.)

④ Insert the cam gear R so that part A is on the upside, with the charge lever set fully to the right end. Slowly turn the charge lever in the direction shown by the arrow until it enters the groove in the cam gear R.
(Refer to Fig. 2-34-3)

⑤ Install the cam plate B, the roller B, and the plate J.
(Refer to Para. 2-33 for the installation method.)

⑥ Install the main gear J.
(Refer to Para. 2-30 for the installation method.)

⑦ Install the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the installation method.)

⑧ Install the belt pulley and the reel belt.
(Refer to Para. 2-28 for the installation method.)

⑨ Hook the tension spring in the position shown in Fig. 2-34-4.

⑩ Install the charge assembly.
(Refer to Item ⑤ of Para. 2-18 for the installation method.)

⑪ Install the cassette housing.
(Refer to Para. 2-1 about the installation method.)

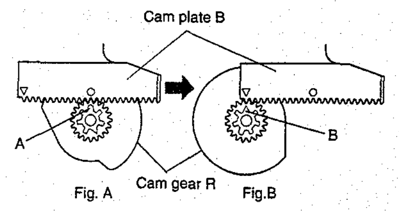


Fig. 2-33-3

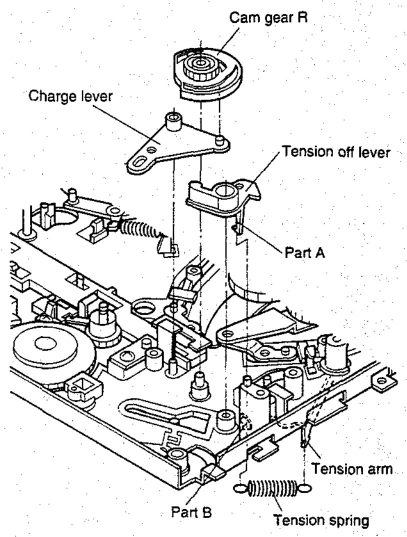


Fig. 2-34-1

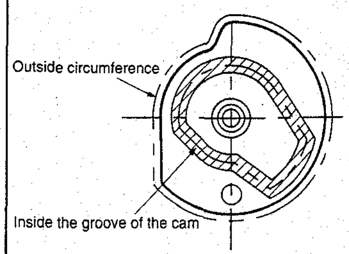


Fig. 2-34-2

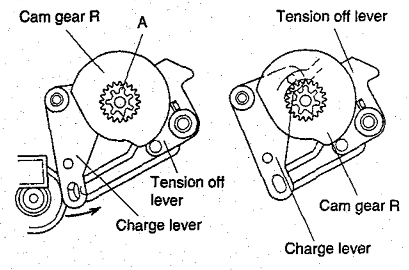

Cam gear R
A
Tension off lever
Tension off lever
Charge lever
Cam gear R
Charge lever

Fig. 2-34-3

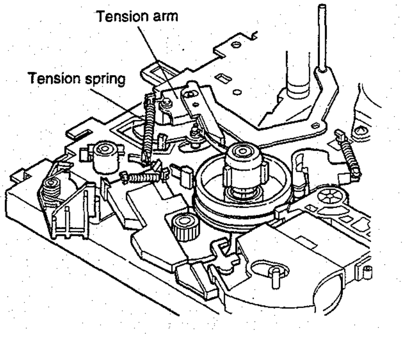

Tension arm
Tension spring

Fig. 2-34-4

## 2-35 Reel Idler Assembly

(Removal)

① Remove the reel belt and the belt pulley.
(Refer to Para. 2-28 for the removal method.)

② Remove the two screws (ⓐ and ⓑ) holding the reel idler assembly.

③ Unfasten the two catches shown in Fig. 2-35-2 and push the reel idler assembly to remove it, with the deck right side up.

(Installation)

① Insert the part B of the reel idler assembly under the plate cam B as shown in Fig. 2-35-1 and ensure projection A enters the hole on the main plate. Position the reel idler assembly so that its screw holes are aligned and secure it with the two screws (ⓐ and ⓑ).
(Fig. 2-35-3 shows its appearance, viewing from the top.)

② Install the belt pulley and the reel belt.
(Refer to Para. 2-28 for the installation method.)

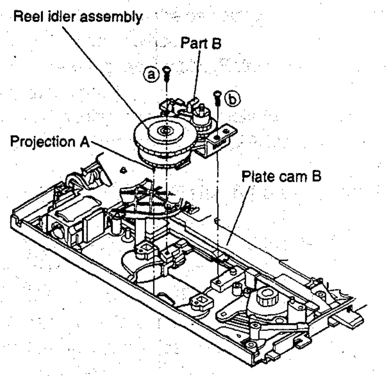

Reel idler assembly
Part B
ⓐ
ⓑ
Projection A
Plate cam B

Fig. 2-35-1

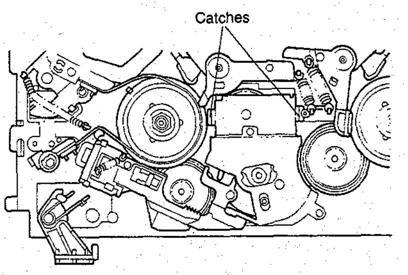


Fig. 2-35-2

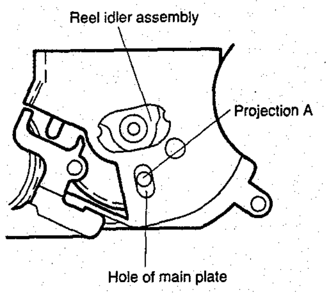

Reel idler assembly
Projection A
Hole of main plate

Fig. 2-35-3

## 2-36 Cam Plate C and Cam Spring C

(Removal)

① Remove the reel belt and the belt pulley. (Refer to Para. 2-28 for the removal method.)

② Remove the reel idler assembly. (Refer to Para. 2-35 for the removal method.)

③ Remove the loading motor assembly (which holds the motor holder). (Refer to Para. 2-29 for the removal method.)

④ Remove the main gear-J. (Refer to Para. 2-30 for the removal method.)

⑤ Remove the plate-J, the roller-B, and the cam plate-B. (Refer to Para. 2-33 for the removal method.)

⑥ Remove the cam spring-C. (Refer to Fig. 2-36-1.)

⑦ Slide the cam plate-C to the left end.

⑧ Unfasten the catch and raise the cam plate-C to remove it. (refer to Fig. 2-36-1.)

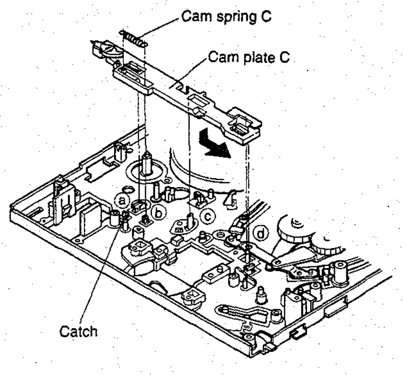

Cam spring C
Cam plate C
ⓐ
ⓑ
ⓒ
ⓓ
ⓔ
Catch

Fig. 2-36-1

(Installation)

① Apply specified grease to the area (A~I) shown in Fig. 2-36-2 of the new cam plate-C.
Area A : (G) [859D055O50]
Area B~I : (PG641) [859D055O30]

② Position the cam plate-C so that the four points(ⓐ, ⓑ, ⓒ and ⓓ) shown in Fig. 2-36-1 enter into the matching holes and slide it to the right end.

③ Install the cam spring-C.

④ Install the cam plate-B, the roller-B, and the plate-J. (Refer to Para. 2-33 for the installation method.)

⑤ Install the main gear-J.
(Refer to Para. 2-30 for the installation method.)

⑥ Install the loading motor assembly (which holds the motor holder). (Refer to Para. 2-35 for the installation method.)

⑦ Install the reel idler assembly.
(Refer to Para. 2-35 for the installation method.)

⑧ Install the belt pulley and the reel belt.
(Refer to Para. 2-28 for the installation method.)

## 2-37 Loading Arm (SP, TU)

(Removal)

① Remove the reel belt and the belt pulley.
(Refer to Para. 2-28 for the removal method.)

② Remove the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the removal method.)

③ Remove the main gear-J.
(Refer to Para. 2-30 for the removal method.)

④ Remove the plate-J, the roller-B, and the cam plate-B.
(Refer to Para. 2-33 for the removal method.)

⑤ Raise the loading arms upward, first SP and then TU, to remove them. (Refer to Fig. 2-37-1)

(Installation)

① Move the takeup and supply tape guides to the unloaded position. If the supply tape guide is in the loaded position it will be necessary to shift the tension arm in the direction of the arrow in Fig. 2-37-2 at the same time moving the supply tape guide to the unloading position.

② Place the new loading arm (TU) in the position shown in Fig. 2-37-1, then place the loading arm (SP) in the position shown in Fig. 2-37-1 at the same time aligning the marks on the cogs, refer Fig. 2-37-3(shaded area).

③ Apply grease (G)[859D055O50] to the area that touches the cogwheel of the loading arm (TU) when the loading arms (SP and TU) are shifted fully to the loading direction. Apply grease (G)[859D055O50] to the gear portion that meshes with the plate cam B.
(Refer to Fig.2-37-4.)

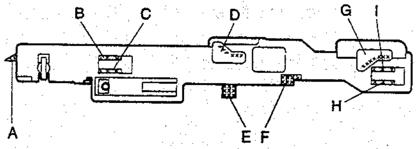


Fig. 2-36-2

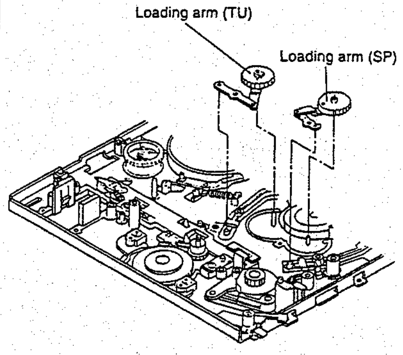


Fig. 2-37-1

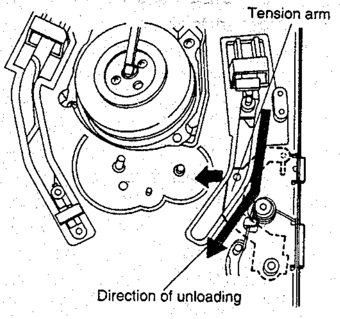


Fig. 2-37-2

④ Install the cam plate-B, the roller-B, and the plate-J. (Refer to Para. 2-33 for the installation method.)

⑤ Install the main gear-J.
(Refer to Para. 2-30 for the installation method)

⑥ Install the loading motor assembly (which holds the motor holder).
(Refer to Para. 2-29 for the installation method.)

⑦ Install the belt pulley and the reel belt.
(Refer to Para. 2-28 for the installation method.)

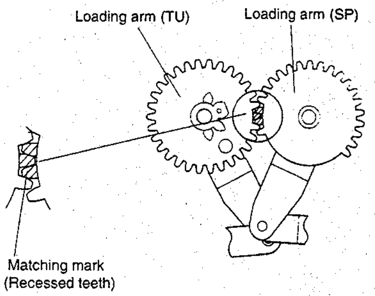


Fig. 2-37-3

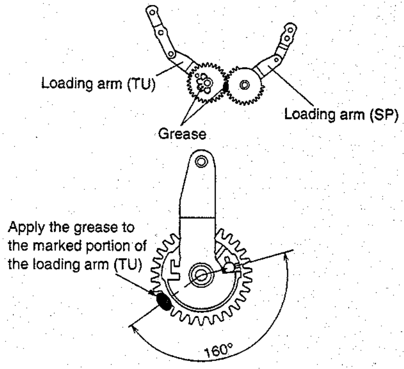


Fig. 2-37-4

## 2-38 Capstan Motor and Lead Card

**Note:** During removal and installation of the capstan motor, take care not to touch or score the tape running surface, and ensure there is no grease on the outside of the motor's rim.

(Removal)

① Unfasten the reel belt.

② Disconnect the lead card, connected to the PCB of the capstan motor and the PCB-HA/AUDIO.
(Refer to Fig. 2-38-1.)

③ Turn the deck the right side up, remove the three screws shown in Fig. 2-38-2 to remove the capstan motor.

**Note:** During removal, support the capstan motor assembly when it is not secured by its fastening screws. Take care not to touch other parts.

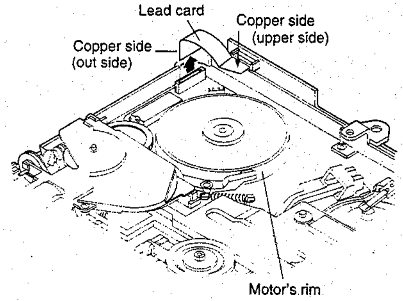


Fig. 2-38-1

(Installation)

① Reverse the deck, position the capstan motor so that the capstan brake is on the outside of the capstan motor.

② Turn the deck the right side up, secure the capstan motor with the three screws shown in Fig. 2-38-2.

③ Bend the new lead card as shown in Fig.2-38-3 and connect it to the connectors of the PCB of the capstan motor and the PCB-HA/AUDIO so that copper side appears as shown in Fig. 2-38-1. Take care not to touch the rotor of the capstan motor.

④ Install the reel belt.
(Refer to Para. 2-28 for the installation method.)

## 2-39 A/C Head Assembly

(Removal)

**Note:** During installation of A/C head assembly, take care not to touch or score the tape running surface.

① Lift the stopper shown in Fig. 2-39-1 upward and disconnect the lead connector (bare wire), which is connected to the PCB-A/C-HEAD.

② Remove the two screws (ⓐ and ⓑ) holding the A/C head assembly to the main plate, and to remove the A/C head assembly. (Refer to Fig. 2-39-2.)

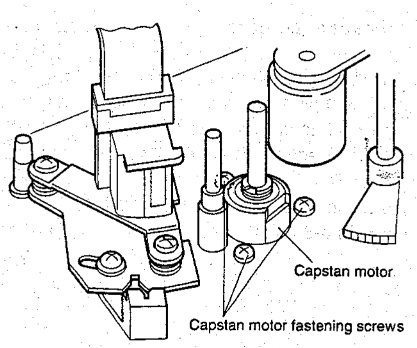


Fig. 2-38-2

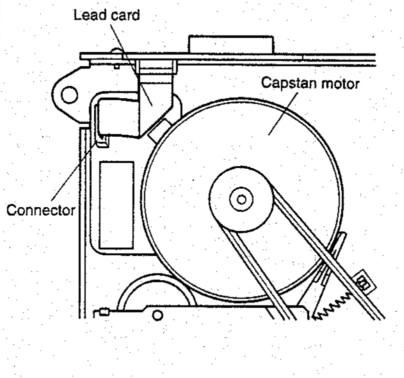


Fig. 2-38-3

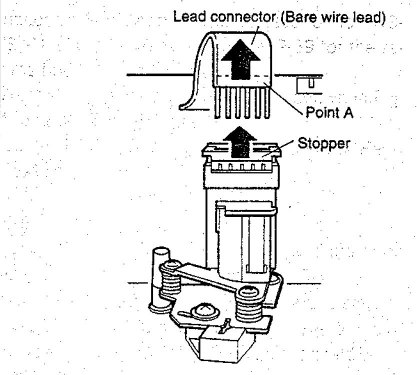


Fig. 2-39-1

(Installation)

① Make sure that the spring(A/C earth spring) is as shown in Fig. 2-39-3.

② Place the A/C head assembly in the position shown in Fig. 2-39-2 and secure it with the two screws(ⓐ and ⓑ).

③ Shift part A downward and lower the stopper. Connect the lead connector to the connector on the PCB-A/C-HEAD as shown in Fig. 2-39-1.

**Note:** Conduct the A/C head adjustment and the phase adjustment as outlined in Para. 3-3 and 3-4 after the new A/C head is installed.

## 2-40 A/C Head

(Removal)

① Disconnect the lead connector connected to the PCB-A/C-HEAD. (Refer to Item ① of Para. 2-39 for the removal method.)

② Remove the three screws(ⓐ,ⓑ and ⓒ), shown in Fig. 2-40-1 to remove the A/C head.

③ Unsolder the PCB-A/C HEAD from the A/C head.(Refer to Fig. 2-40-1.

(Installation)

① Install the A/C head with the A/C spring and the three screws(ⓐ,ⓑ and ⓒ) as shown in Fig. 2-40-1.

**Note:** When installing the A/C head on the A/C plate, the base plate of the A/C head must be parallel to the A/C plate and the spacing between them should be as specified in Fig. 2-40-2.

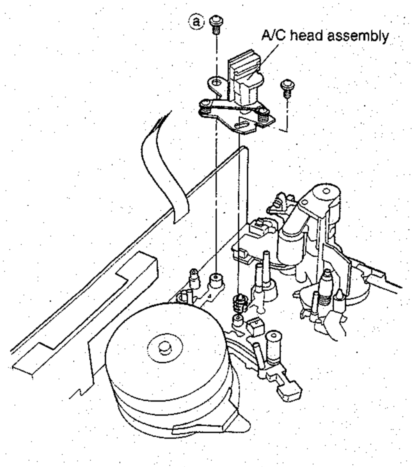


Fig. 2-39-2

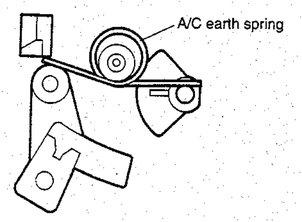


Fig. 2-39-3

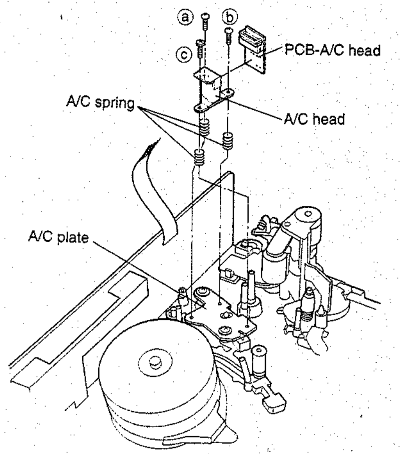


Fig. 2-40-1

② Connect the lead connector to the PCB-A/C-HEAD. (Refer to Item ③ of Para. 2-39 for the installation method.)

③ Perform the A/C head adjustment as outlined in Para. 3-3 and the phase adjustment as outlined in Para. 3-4.

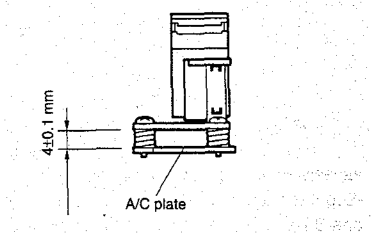

4±0.1 mm
A/C plate

Fig. 2-40-2

## 2-41 Supply & Takeup Guide Rollers

(Removal)

① Loosen the set screws with a hexagon key so that the guide rollers rotate freely.

② Turn the height adjustment screws at the top of the guide rollers counterclockwise with a height adjustment screwdriver to loosen them. Lift the guide roller upward to remove them from the tape guides.(Refer to Fig. 2-41-1)

(Installation)

① Make sure that the rubber rings are fixed to the fastening thread portions of the new guide rollers.

② Perform the following steps ③ to ⑤ to seat in the rubber rings.

③ Slowly turn the guide rollers clockwise until the rubber rings are firmly seated.

④ Turn the guide rollers a further 1/6 of a turn clockwise and then turn them one turn counter-clockwise.

⑤ Slowly turn the guide rollers clockwise until they become firmly seated again. Turn the guide rollers a further 1/6 of a turn clockwise.

⑥ Secure the guide rollers lightly with the set screws. Perform the mechanism check and adjustment of the FM envelope as outlined in Para. 3-2.

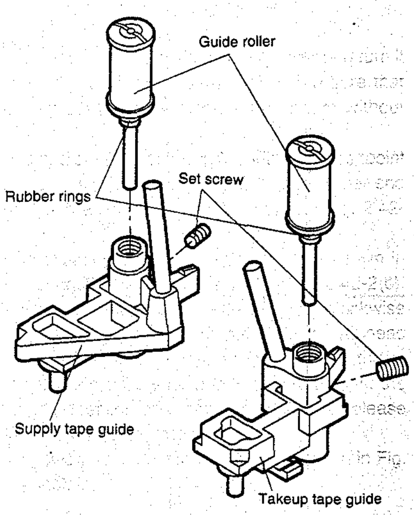

Guide roller
Set screw
Rubber rings
Supply tape guide
Takeup tape guide

Fig. 2-41-1

## 2-42 Cleaning Roller, Cleaning Arm, Cleaning Lever, and Cleaning Spring

(Removal)

① Remove the PCB-HA/AUDIO. (Refer to Para. 2-8 for the removal method.)

② Unfasten the catch to remove the cleaning roller. (Refer to Fig. 2-42-1)

③ Turn part A of the cleaning assembly clockwise as shown in Fig. 2-42-2 to release the catch part B Fig. 2-42-2 and Fig. 2-42-3(c). Release the catch part E and remove the cleaning assembly from the shaft.

④ Remove the cleaning spring to detach the cleaning arm and the cleaning lever.

(Installation)

① Attach the cleaning arm to the cleaning lever and turn it clockwise as shown in Fig. 2-42-3(c). Make sure that the cleaning arm and the cleaning lever turn without binding.

② Hook one end of the cleaning spring with the boss (point C), projecting from the cleaning arm, and the other end to point D of the cleaning lever as shown in Fig. 2-42-3(d).

③ Place the cleaning assembly in the position shown in Fig. 2-42-1, and in the direction shown in Fig. 2-42-2(b). Turn the part A, shown in Fig. 2-42-2, counterclockwise to set the part B under the A/C plate of the A/C head assembly. Make sure that the spring hooks with the boss of the main plate shown in Fig. 2-42-2. Shift the part A in the direction shown by the arrow and release to make sure that it returns.

④ Insert the cleaning roller into the position shown in Fig. 2-42-1 to install it.

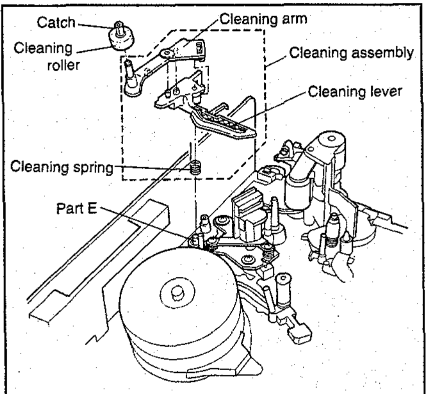

Catch
Cleaning roller
Cleaning arm
Cleaning assembly
Cleaning lever
Cleaning spring
Part E

Fig. 2-42-1

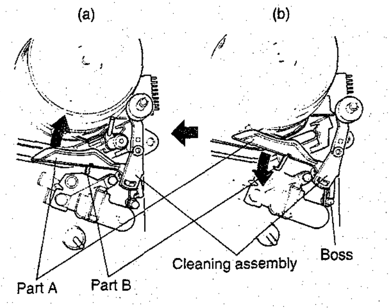

(a)
(b)
Cleaning assembly
Boss
Part A
Part B

Fig. 2-42-2

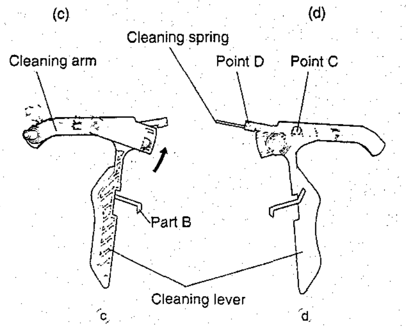

(c)
(d)
Cleaning spring
Cleaning arm
Point D
Point C
Part B
Cleaning lever

Fig. 2-42-3

## 2-43 Supply & Takeup Tape Guide Assemblies

(Removal)

① Remove the cassette housing.
(Refer to Para. 2-1 for the removal method.)

② Remove the PCB-HA/AUDIO.
(Refer to Para. 2-8 for the removal method.)

③ Remove the cleaning assembly.
(Refer to item ④ of Para. 2-42 for the removal method.)

④ Unscrew the three screws (ⓐ, ⓑ and ⓒ) to remove the drum base together with the drum assembly.
(Refer to Fig. 2-43-1.)

⑤ Slide the supply and takeup tape guide assemblies to the end of the loaded position by either of the following methods.

- Supply voltage (approximately +5V voltage on the red wire) to the loading motor as in ② of the removal method in Para. 2-19.
- Turn part A of pulley worm J by hand, in the direction shown by the arrow (a) as shown in Fig. 2-43-3. Raise the supply and takeup tape guide assemblies upward to remove them.

(Installation)

① Apply grease (PG-641) [859D055O30] to the area shown in Fig. 2-43-2 of the supply tape guide assembly.

② Install the supply and takeup tape guide assemblies so that they respectively enter the holes at the ends of the loading arms (SP and TU)attached to the reverse side of the deck as shown in Fig. 2-43-1.

③ Slide the supply and takeup tape guide assemblies to the unloaded position, by either of the following methods so that the upper hole of the mode switch aligns with that of the cogwheel as shown in Fig. 2-43-4.

- Supply voltage (approximately 5V ), reversing the polarity used in ④ of the removal method, to the loading motor as ⑤ of the installation method in Para. 2-19.
- Turn part A of the pulley worm J by hand, in the direction shown by the arrow (b) as shown in Fig. 2-43-3.

④ Make sure that the hole of the gear joint J aligns with the matching mark of the main plate, and the matching mark of the gear pinch with that of the mode switch as shown in Fig. 2-43-5.

⑤ Install the drum base on which the drum assembly is attached and secure it with the three screws (ⓐ,ⓑ and ⓒ) as shown in Fig. 2-43-1.
(Tighten the screws in the order ⓐ→ⓑ→ⓒ.)

⑥ Install the cleaning assembly.
(Refer to Item ③ of Para. 2-42 for the installation method.)

⑦ Install the PCB-HA/AUDIO.
(Refer to Para. 2-8 for the installation method.)

⑧ Install the cassette housing.
(Refer to Para. 2-1 for the installation method.)

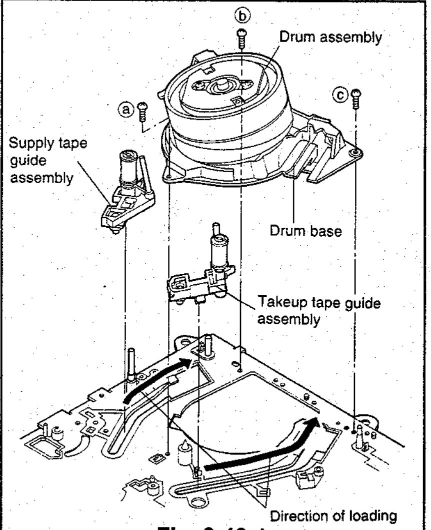

ⓑ
Drum assembly
ⓐ
ⓒ
Supply tape guide assembly
Drum base
Takeup tape guide assembly
Direction of loading

Fig. 2-43-1

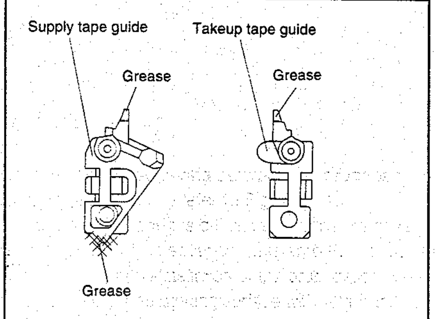

Supply tape guide
Takeup tape guide
Grease
Grease
Grease

Fig. 2-43-2

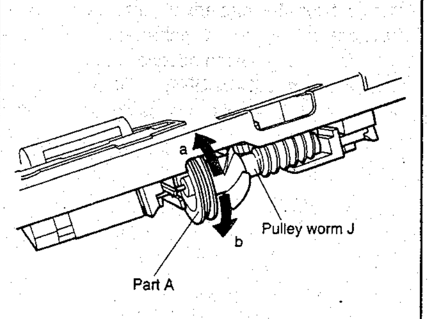

a
b
Pulley worm J
Part A

Fig. 2-43-3

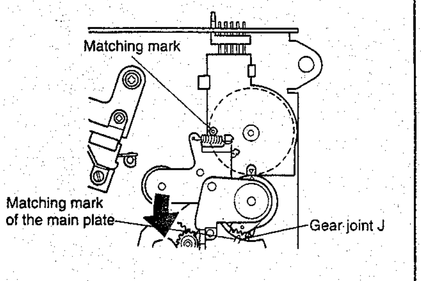

Matching mark
Matching mark of the main plate
Gear joint J

Fig. 2-43-4

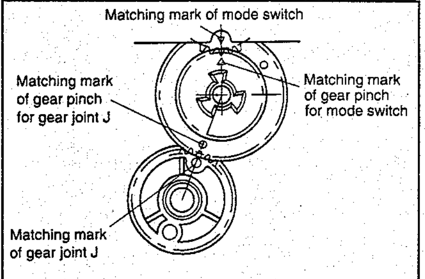

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 2-43-5

## 2-44 Drum Base Spring

(Removal)

① Remove the drum base spring between the drum base and the drum assembly. (Refer to Fig. 2-44-1.)

**Note:** If the drum base spring is difficult to remove, remove the drum assembly in advance. (Refer to Para.2-10)

**Note:** During removal and installation of the drum assembly, do not touch the tape running surface with your hands.

(Installation)

① Set the drum base spring in the gap between the drum base and the drum assembly. Make sure that the drum base spring is secure enough not to fall out.

② Apply grease (PG-641) [859D055O30] to the area of the drum base spring as shown in Fig. 2-44-1.

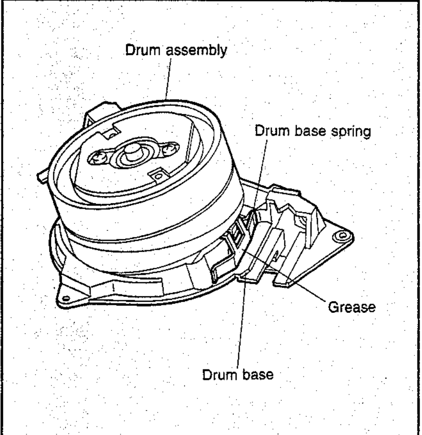

Drum assembly
Drum base spring
Grease
Drum base

Fig. 2-44-1

## 2-45. Replacement of ASSY IMPEDANCE ROLLER

(Removal)

① Unfasten the catch to remove the FLY WHEEL J.

② Remove the IMPEDANCE ROLLER SPRING-J from the catch ⓐ shown in Fig. 2-45-2.

③ Shift the ASSY IMPEDANCE ROLLER in the direction shown by the arrow. Unfasten the catch ⓑ and raise the ASSY IMPEDANCE ROLLER to remove it from the HOLDER TG.

④ Unfasten two catches of the HOLDER TG on the reverse side to remove the HOLDER TG. [Fig. 2-45-4]

(Installation)

① Mount the HOLDER TG on the MAIN PLATE. [Fig. 2-45-4]

② Hook the one side of the IMPEDANCE ROLLER SPRING-J to the catch ⓒ and the other side to the catch ⓓ to install the IMPEDANCE ROLLER SPRING-J on the ASSY IMPEDANCE ROLLER. [Fig. 2-45-3]

③ Install the ASSY IMPEDANCE ROLLER, to which the IMPEDANCE ROLLER SPRING-J is attached, on the HOLDER TG.

**NOTE:** Installation of the ASSY IMPEDANCE ROLLER will be easier by pulling the PCB-HA/AUDIO slightly in the direction shown by the arrow in Fig. 2-45-4.

④ Make sure that the IMPEDANCE ROLLER SPRING-J is hooked at the catch ⓐ of the HOLDER TG shown in the Fig. 2-45-5.

⑤ Install the FLY WHEEL J on the ASSY IMPEDANCE ROLLER so that the side whose hole entrance is cut out diagonally looks up.

⑥ Make sure that three catches are tightly hooked on the FLY WHEEL. If they are not, hook them tightly with the tweezers. [Fig. 2-45-1]

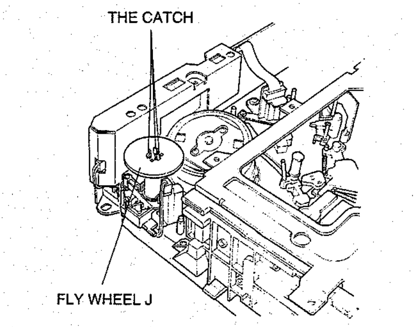

THE CATCH
FLY WHEEL J

Fig. 2-45-1

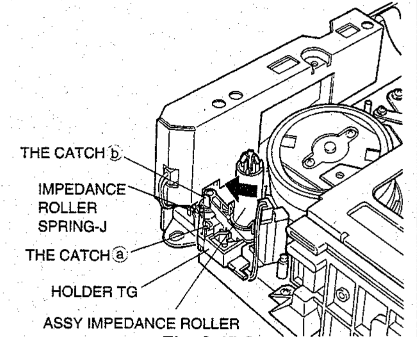

THE CATCH ⓑ
IMPEDANCE ROLLER SPRING-J
THE CATCH ⓐ
HOLDER TG
ASSY IMPEDANCE ROLLER

Fig. 2-45-2

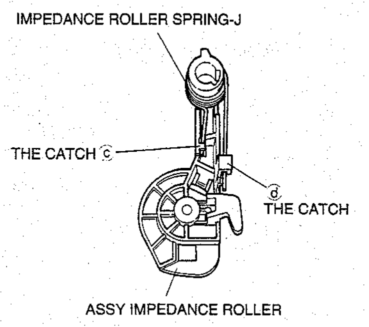

IMPEDANCE ROLLER SPRING-J
THE CATCH ⓒ
ⓓ THE CATCH
ASSY IMPEDANCE ROLLER

Fig. 2-45-3

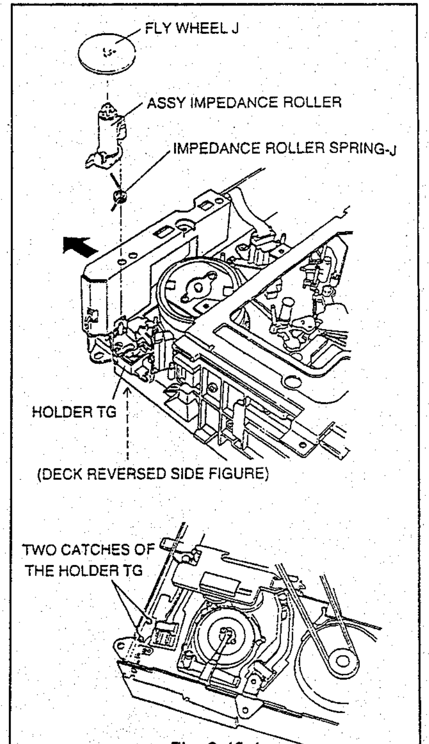

FLY WHEEL J
ASSY IMPEDANCE ROLLER
IMPEDANCE ROLLER SPRING-J
HOLDER TG
(DECK REVERSED SIDE FIGURE)
TWO CATCHES OF THE HOLDER TG

Fig. 2-45-4

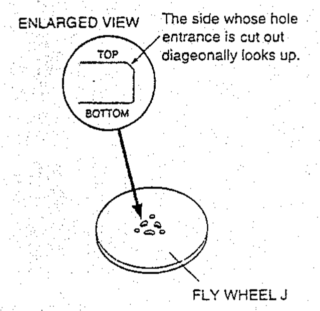

ENLARGED VIEW
The side whose hole entrance is cut out diageonally looks up.
TOP
BOTTOM
FLY WHEEL J

Fig. 2-45-5

## 3. Interchangeability Adjustment of the Mechanism

**Note1:** Tracking may need to be preset during interchangeability adjustments of the mechanism. Digital tracking is preset by short circuiting TP5A and TP5B on the PCB-MAIN.

**Note2:** The adjustments are performed in the playback mode, using the stair step signal of an alignment tape. Connect an oscilloscope to TP2A and external Trig. from TP2H, unless otherwise specified.

### 3-1 Adjustment of Back-Tension and Tension Pole Position

Run a blank tape for several minutes to break in the reel disks and the transport before making the adjustment.

① Cut out the alignment tape [PM6KH3 : 859C339030] as shown in Fig. 3-1-2. This allows the boss to be adjusted while playing the tape by inserting hexagon wrench through the round hole in the cassette housing shown in Fig. 3-1-1.
(Take care not to allow fragments of the cassette case inside the cassette tape.)

② Playback an alignment tape which has a cut out.

③ Make sure that the tip section A of the tension arm is between the divisions " 2 " and " 2.5 " on the main plate. (Fig. 3-1-1) (The divisions are numbered from the right to left.)

④ If tip section A of the tension arm is to the right of " 2 ", turn the boss clockwise.
If A is to the left of " 2.5 ", turn it counter-clockwise.

⑤ Insert a back tension measuring jig (Part No. 859C346060) and set the VCR to the playback mode.

⑥ When tape travel becomes steady, make sure that the reading of the Back Tension Measuring Jig is 50±6g-cm.

⑦ If the reading is high, replace the tension spring.

⑧ When tape travel is steady, check visually to make sure that the runout of the tension pole is 1mm or less. (Fig. 3-1-3)

⑨ If the runout is not within the specified value, replace the reel disk.

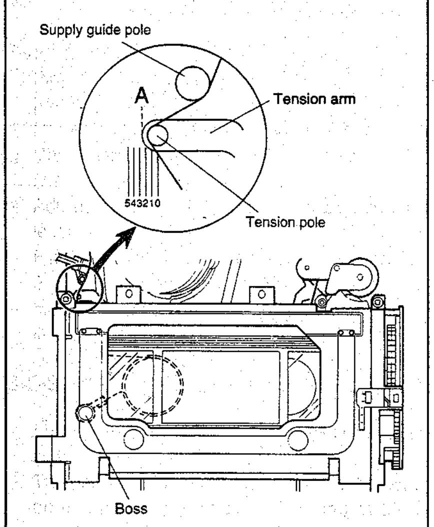


Fig. 3 - 1 - 1

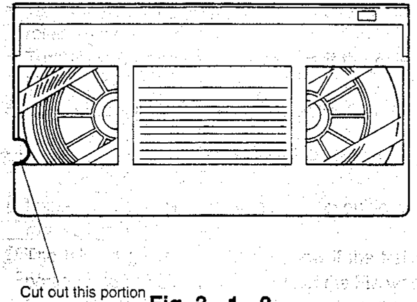


Fig. 3 - 1 - 2

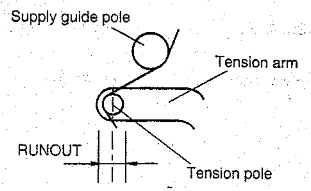


Fig. 3 - 1 - 3

### 3-2 Check and Adjustment of FM Envelope

### 3-2-1 Guide Roller Adjustment

① Play back the alignment tape.
[PM6KH3 : 859C339030]

② Preset tracking. (Refer to NOTE 1 in Para. 3.)

③ Check if the FM waveform is flat like A.
(Refer to Fig. 3-2-1)

④ Adjust the height of the supply guide roller if the leading portion (the entry side of the drum) of the FM waveform is not flat, like B or C. (Refer to Fig. 3-2-1) Adjust the height of the takeup guide roller if the trailing portion (the exit side of the drum) is not flat, like D or E.

### 3-2-2 Adjustment of Supply Guide Roller Height

① Loosen the set screw until the supply guide roller is held lightly when rotated.

② The supply guide roller may be low if the leading portion (the entry side of the drum) of the FM waveform is like B, and high if like C. Turn the adjusting screw at the top of the roller to adjust the height of it so that the FM waveform is flat like A.

- Turn the adjusting screw counter-clockwise if the roller is low.
- Turn the adjusting screw clockwise if the roller is high.

③ Coarsely adjust the phase as in Item 3-3-4.

### 3-2-3 Adjustment of Takeup Guide Roller Height

① Loosen the set screw until the takeup guide roller rotates lightly.

② The takeup guide roller may be low if the trailing portion (the exit side of the drum) of the FM waveform is like D, and high if like E. Turn the adjusting screw at the top of the roller to adjust the height so that the FM waveform is flat like A.

- Turn the adjusting screw counter-clockwise if the roller is low.
- Turn the adjusting screw clockwise if the roller is high.

③ Coarsely adjust the phase as in Item 3-2-4.

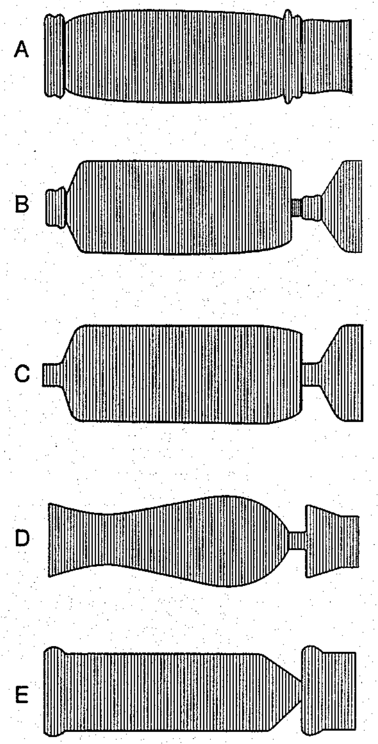


Fig. 3 - 2 - 1

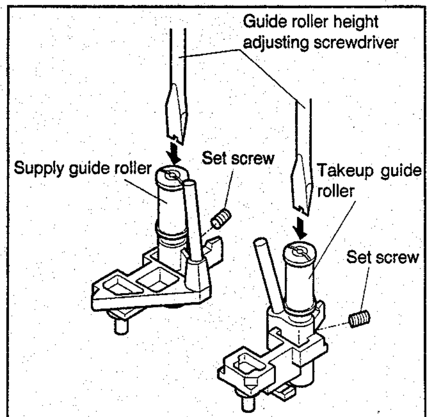


Fig. 3 - 2 - 2

### 3-2-4 Coarse Adjustment of Phase

① Play back the alignment tape.
[PM6KH3 : 859C339030]

② Preset tracking. (Refer to NOTE 1 in Para. 3.)

③ Check the FM waveform after checking and adjusting the guide rollers.

④ If the amplitude of the FM waveform is narrow like F because of out of phase, adjust it to maximum like G, as shown in Fig. 3-2-4 by the following procedure. Loosen the screw E , insert a screw driver into the groove at the Base A/C and the main plate, and shift the Base A/C right and left.

⑤ Tighten the screw E to secure the base-A/C in place.

### 3-2-5 Check of FM Waveform Flatness

① Play back the alignment tape.
[PM6KH3 : 859C339030]

**Note:** In the following adjustment, follow the next procedure for automatic/manual-selection and adjustment of tracking.

- For the manual tracking adjustment, press an up/down button during reproduction.
- To change the adjustment mode from manual to automatic in the tracking adjustment, press the up and down buttons at the same time.

② In the manual tracking mode, change tracking and make sure the amplitude is changeable while the FM signal remains flat.

③ Adjust tracking so that the amplitude of the FM waveform is maximum. Set the oscilloscope so the amplitude of the FM waveform is 5 division.

④ Adjust tracking so that the peak value of the FM waveform is 4 divisions. Check if the FM waveform B, C, D, and E are within the specified values shown in Fig. 3-2-5.

⑤ If the waveform is not within the specified value, repeat the procedure for checking and adjustment of FM envelope in Item 3-2 from the beginning.

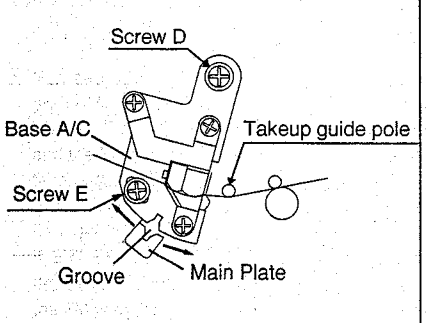


Fig. 3 - 2 - 3

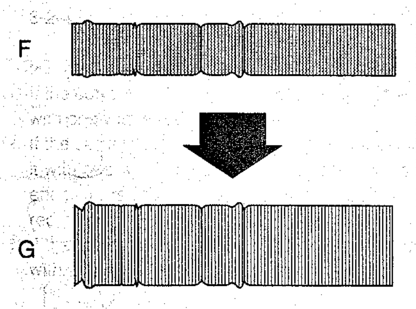
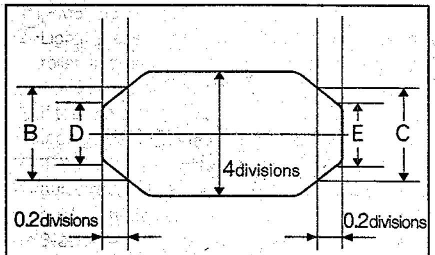


Fig. 3 - 2 - 4



| | |
|---|---|
| B,C | At least 2.8 of the scale |
| D,E | At least 2.0 of the scale |

Fig. 3 - 2 - 5

### 3-2-6 Check 1: Tape Running Condition at the Guide Rollers (Refer to Fig. 3-2-6)

① Play back the alignment tape.
[PM6KH3 : 859C339030 ]

② Visually check if there is a space between the tape and the lower flange of the supply guide roller and takeup guide roller.

③ If there is no space, replace the tape guide as in Item 3-2-7.

④ If EITHER GUIDE ROLLER is replaced. Perform the GUIDE ROLLER adjustment in item 3-2-1. And the FM waveform flatness check in item 3-2-5.

⑤ Load and unload the tape several times, check that flatness of the FM waveform does not change.

⑥ If flatness changes, check if the A/C arm is loose. If it is not loose, replace the A/C arm and repeat the procedure for coarse adjustment of phase in Item 3-2-4.

### 3-2-7 Replacement of Tape Guides

① If the current tape guide has no marking, replace it with one with a red mark.

② If the current tape guide has a black mark, replace it with one with no mark. If this replacement is not effective, replace the tape guide with one with a red mark.

③ If the current tape guide has a red mark, replace it with another one with red mark.

### 3-2-8 Check 2: Tape Running Condition on Guide Rollers

① Play back the alignment tape.
[PM6KH3 : 859C339030 ]

② Lightly press and release the top of the supply guide roller and takeup guide roller. Check that the FM waveform is quickly restored to the previous level.

③ If the waveform is not quickly restored, replace the tape guide as in Item 3-2-7.

④ If the supply tape guide is replaced, check the guide roller as in Item 3-2-1, and if the takeup tape guide is replaced, check the guide roller as in Item 3-2-1. Perform the check FM waveform flatness check as in Item 3-2-5.

⑤ If satisfactory, tighten the set screw of the guide roller on the supply side and the takeup side.

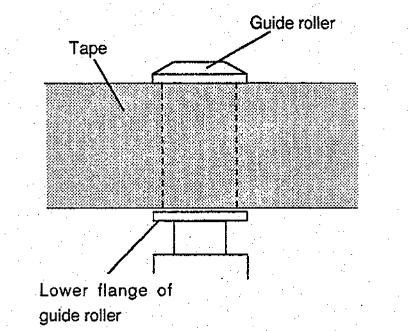


Fig. 3 - 2 - 6

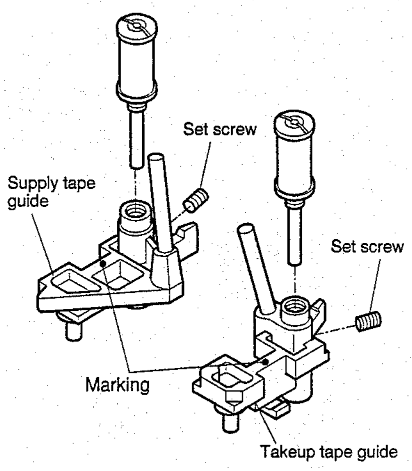


Fig. 3 - 2 - 7

Identification of Tape Guide Item Number
(Example; Parts No. 635B0590$\boxed{1}$0
Item No.

| | |
|---|---|
| Item No. 1 | No marking |
| Item No. 2 | Marked with black magic marker |
| Item No. 3 | Marked with red magic marker |

*The marking point is on the top of the tape guides shown in figure above.

## 3-3 Adjustment of A/C Head
### 3-3-1 Adjustment of A/C Head Slant

① Playback a blank tape.
② Slowly turn the adjusting screw C counter-clockwise to crease the bottom of the tape slightly at the flange portion of the takeup tape guide.
③ Return adjusting screw C slowly to remove the crease.
④ Slowly turn adjusting screw C counter-clockwise again and stop turning just before the tape is creased.

### 3-3-2 Adjustment of A/C Head Azimuth and Height

① If the height of the CTL head is different from the specified-value in Fig. 3-3-2, adjust the height by the adjusting screw A.
② If adjusting screw A is moved, repeat the procedure in Item 3-3-1 to adjust the A/C head Slant.
③ Connect the oscilloscope to the audio output terminal and set the VCR to the playback mode.
④ Playback the standard tape. [PM6KH3 : 859C339030]
⑤ Turn adjusting screw B to adjust azimuth so that the audio output level is maximum. Set the scope for an amplitude of 5 divisions.
⑥ After the adjustment of ⑤, pull out the screw driver and check if the audio output level is 4.6 divisions or more, when the maximum level (audio output) of ⑤ was set for 5 divisions.
⑦ If the audio output level is below the specified value, repeat the procedure ①~⑥.
⑧ Push the A/C head to the right and left(in the direction of A and A' in Fig. 3-3-1) and the release the A/C head. Check that the audio output level does not change. (Do not push past the point where the audio output level is reduced by 3/4 of its maximum value.)
⑨ Set the VCR to the playback mode and check if the change of the audio output level is less than 2dB.
⑩ If the change is over 2dB, adjust the A/C head slant again and recheck.
⑪ If not satisfactory, replace the takeup tape guide complying with the following procedure and repeat this adjustment.

- If the original tape guide has no marking, replace it with the one with a black mark.
- If the original tape guide has a black mark, replace it with one with a black mark.
- If the original tape guide has a red mark, replace it with the one with a red mark. If this replacement is not effective, replace it with one with a black mark.

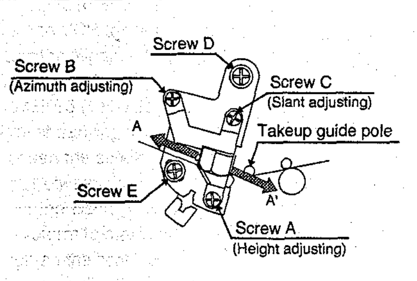


Fig. 3 - 3 - 1

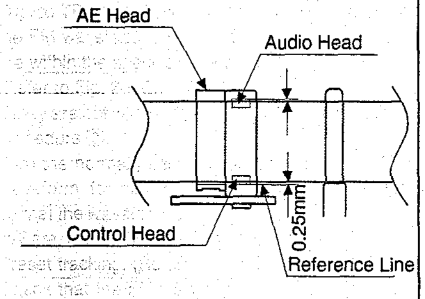


Fig. 3 - 3 - 2

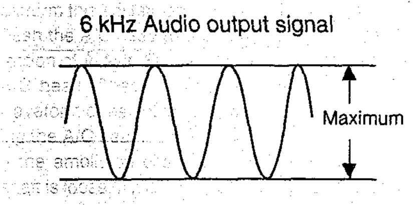


Fig. 3 - 3 - 3

Identification of Tape Guide Item Number
(Example; Parts No. 635B0590$\boxed{1}$0)
Item No.

| | |
|---|---|
| Item No. 1 | No marking |
| Item No. 2 | Marked with black magic marker |
| Item No. 3 | Marked with red magic marker |

*The marking point is on the tops of the Takeup and Supply tape guides.
(Refer to Fig. 3-2-7)

## 3-4 Adjustment of Phase

① Set the VCR to the playback mode.
(Use the alignment tape specified below to perform adjustment ①~④.)
[PM3KE6 (CH1) 25 : 859C568050]
② Preset tracking. (Refer to NOTE 1 in Para. 3.)
③ Loosen the screw E, insert a screw driver into the gap between the Base A/C and the main plate, and shift the Base A/C right and left to adjust the FM waveform to maximum.
④ Tighten the screw E.
⑤ Play back the alignment tape. (PMX:859C568070)
⑥ Connect TP2A ( the FM waveform output) and the audio output terminal to the oscilloscope, external Trig. to TP2H, and check if the missing portions of the FM waveform and that of the audio waveform are within the specified value (field).
(Refer to Fig. 3-4-2.)
⑦ If they are not within the specified value, repeat the procedure ③.
⑧ Turn the normal tracking control to adjust the FM waveform for maximum and set the oscilloscope so that the waveform is '5' divisions. (Refer to Note in Para. 3-2-5 about tracking adjustment.)
⑨ Preset tracking. (Refer to NOTE 1 in Para. 3.)
⑩ Check that the FM waveform on the oscilloscope is " 4.8 " or more divisions.
⑪ If the FM waveform is below " 4.8 " divisions, perform this adjustment after tracking preset.
⑫ Push the A/C head to the right and left (in the direction of A-A' in Fig. 3-4-1) and then release the A/C head. Check that the amplitude of the FM waveform does not change from that before shifting the A/C head.
⑬ If the amplitude changes, check if the A/C arm shaft is loose. If it is not loose, replace the A/C arm and repeat the procedure of this adjustment from the beginning, after the adjustment of A/C head in Item 3-3.
⑭ Alternately load and unload the tape several times to check that the amplitude of the FM waveform does not change.

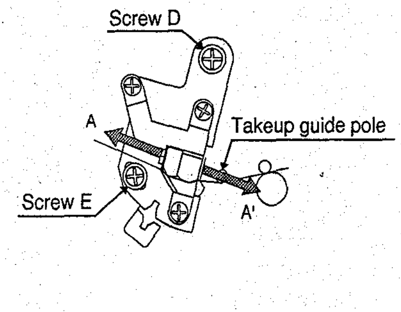


Fig. 3 - 4 - 1

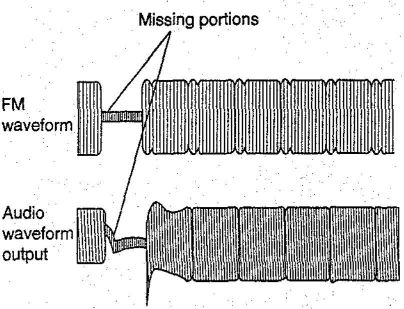


Fig. 3 - 4 - 2

## 3-5 Adjustment of Takeup Guide Arm Height

① Run a final portion of E-240 blank tape in the reverse search mode.

② Tighten the adjusting nut of takeup tape guide until the tape is creased at the lower flange of the takeup guide pole. Then slowly return the nut and stop at the point where the crease is removed. (During adjustment, use a uncovered cassette tape or raise the cover so that the adjustment can be performed.)

**Note:** During adjustment, turn the adjusting nut in the loosening direction. Do not turn the nut more than ±1/2 turn.

③ Eject the cassette tape, set the VCR to the reverse search mode again, and check that the tape is not creased at the upper or lower flange of the takeup tape guide.

④ Set the VCR to the playback mode and check that the tape is not creased at the upper or lower flange of the takeup guide pole.

⑤ Run the start portion of E-180 blank tape in the forward search mode and check that the tape is not creased at the takeup guide pole.

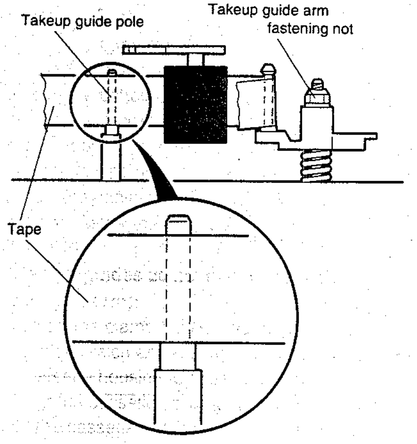


**Fig. 3 - 5**

## 4. Servicing for Tape Jamming during the Loading Mode

① Remove the upper cover.

② Remove the front unit.

③ Remove the bottom panel.

④ Reverse the deck and turn the pulley worm J in the direction shown by the arrow in Fig.4-1, observe whether the tape guides move to the unloading position. If they do not, follow the procedure (1).
If they do, follow the procedure (2).

### (1) If the tape guides do not move (the pulley worm J does not turn);

① Unfasten the clamp holding the leads of the loading motor, which are attached to the side plate of the cassette housing. Unscrew screws (ⓐ and ⓑ) holding the cassette housing as shown in Fig. 4-2.

② Hold the cassette door with a screw driver to keep it open. (Take care not to allow the screw driver to touch other parts of the tape transport.)

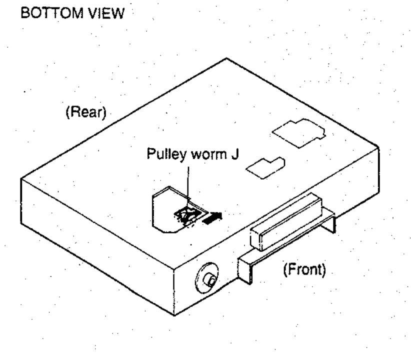


**Fig. 4 - 1**

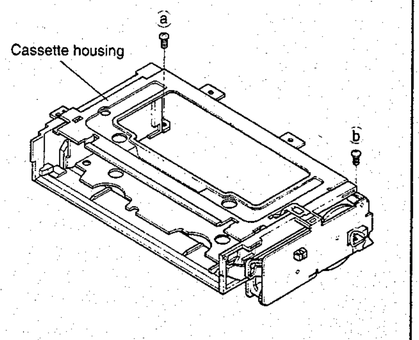


**Fig. 4 - 2**

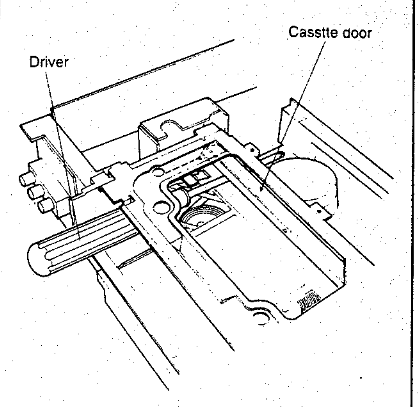


**Fig. 4 - 3**

③ Open the cassette door fully with your hand. Unfasten the catch to remove the pinch roller arm cap as shown in Fig. 4-4. (Refer to Para. 2-24 for the removal method.)

④ Push part A of the pinch roller arm assembly, shown in Fig. 4-5, in the direction shown by the arrow to make a space between the pinch roller arm assembly and the tape. Remove it together with the pinch cam taking care not to damage the tape.

⑤ Remove the screw driver (refer to Item ②), while holding the cassette door open with your hand. While pushing the tension arm in the direction shown by the arrow in Fig. 4-6 raise the cassette housing upward to remove it from the tape transport as shown in Fig. 4-7. Take care that the grease, which is applied to the main plate, does not adhere to the tape.

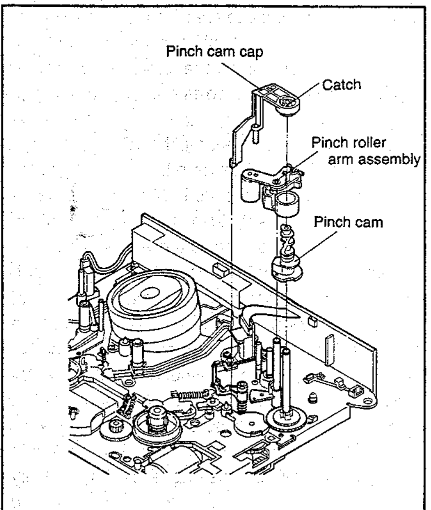

Pinch cam cap
Catch
Pinch roller arm assembly
Pinch cam

Fig. 4 - 4

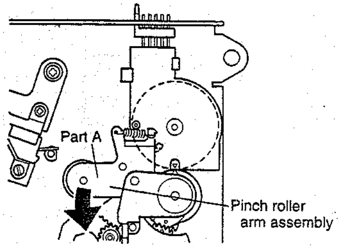

Part A
Pinch roller arm assembly

Fig. 4 - 5

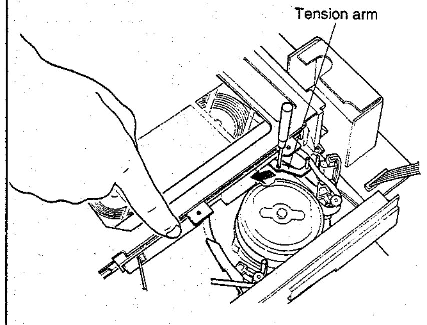

Tension arm

Fig. 4 - 6

⑥ Turn the cassette reel of the cassette tape to wind up the tape as shown in Fig. 4-8.

⑦ Turn the wheel gear shown in Fig. 4-9 in the direction shown by the arrow to eject the cassette tape.

⑧ Reverse the deck and turn the motor pulley J in the direction, shown by the arrow in Fig. 4-1, so that the matching mark M of the mode switch is in the position shown in Fig. 4-10 (the eject position). Make sure that the matching marks of the mode switch and the gear pinch, and those of the gear pinch and the joint gear, respectively, align as shown in Fig. 4-11. Turn the takeup guide arm clockwise to such a degree that takeup guide gear is not in the way of mounting the pinch roller cam to the shaft. Install the pinch roller cam so that its holes align with the triple catch of the gear pinch. (Refer to Para. 2-24 for the installation method.)

⑨ Install the pinch roller arm and the pinch roller arm cap.

⑩ Install the cassette housing. (Refer to Para. 2-1 for the installation method.)

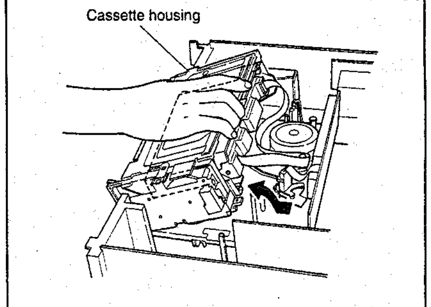

Cassette housing

Fig. 4 - 7

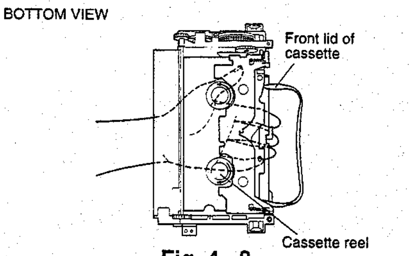

BOTTOM VIEW
Front lid of cassette
Cassette reel

Fig. 4 - 8

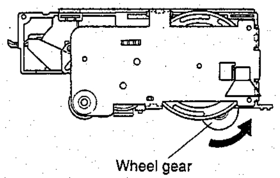


Fig. 4 - 9

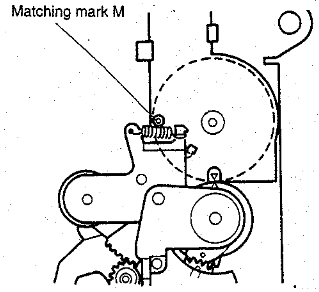

Matching mark M

Fig. 4 - 10

**(2) If the tape guides move (the pulley worm J turns);**

① Reverse the deck and turn the pulley worm J in the direction shown by the arrow in Fig. 4-1 so that the takeup guide arm moves to the end of the unloading cycle.

② Turn the capstan shaft, shown in Fig. 4-12, clockwise to turn the reel so that the tape is wound back into the cassette. (Take care not to scar or stain the capstan shaft. After winding up the tape, clean the capstan shaft with alcohol, refer to Para. 1-2.)

③ Turn the pulley worm J as in Item ① so that the matching mark of the mode switch is in the position shown in Fig. 4-10 (the eject position). Eject the cassette tape.

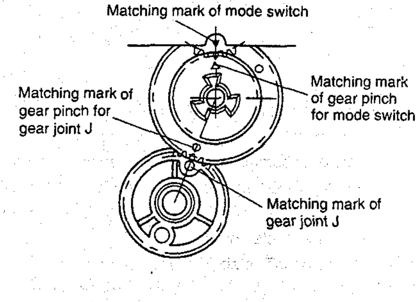

Matching mark of mode switch
Matching mark of gear pinch for gear joint J
Matching mark of gear pinch for mode switch
Matching mark of gear joint J

Fig. 4 - 11

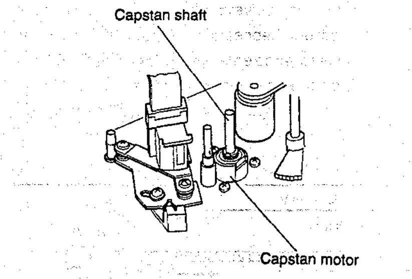


Fig. 4 - 12

# SPECIFICATION OF VPS RECORDING SYSTEM

## [HS-551V(G) only]

## 1. VPS Signal

The VPS signal makes it possible during timer recording of television programs to switch on and off the unit at the correct time by using the preprogrammed recording time. The VPS signal is transmitted in the 16th line of the vertical blanking signal. Refer to Fig. 1. The VPS data signal is shown in Fig. 2. The television stations are responsible for changing of the VPS data. These are included in words 11 to 14.

The normal VPS code includes time data and program data. It is transmitted with the program and recognized by the unit as program identification. A program, which was scheduled for the time from 0:99 to 4:00 and the start of which was changed to the previous day, keeps its original label. If the program is extended, the label is valid until 4:00 of the following day, if the correct sending code is received. The maximum starting time for a delayed program is 4:00 of the following day.

## 2. Expected VPS time and type of VPS recording

2-1 At 20:00 on the day before the starting time the recorder is switched on and enters the expected VPS time. During the expected VPS time the unit is switched to the corresponding channel and waits for the VPS signal.

2-2 If a VPS signal, which confirms to the preprogrammed signal, is received, the unit switches into the recording mode.

2-3 If no VPS signal or status code is transmitted, the original recording time is used.

2-4 If an interruption code is transmitted during the VPS recording, the recording is stopped and the unit switches into the VPS stand-by mode. The recording is started, as soon as the regular VPS code is received again.

2-5 If the normal VPS code changes after the programmed timer recording into an unnormal code, the recording is finished.

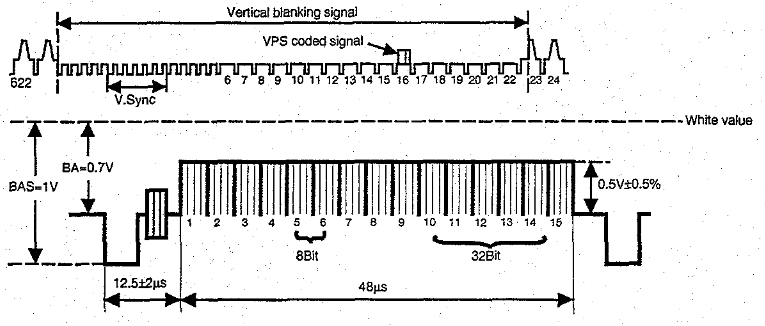
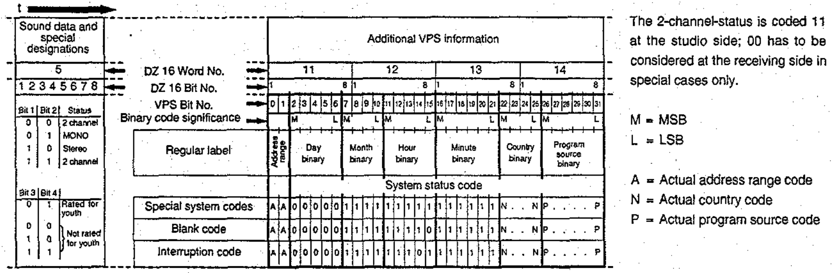


Fig. 1 Inserting the data line into the FBAS signal



t →

| Sound data and special designations |
|---|
| 5 |
| 1 2 3 4 5 6 7 8 |

| Bit 1 | Bit 2 | Status |
|---|---|---|
| 0 | 0 | 2 channel |
| 0 | 1 | MONO |
| 1 | 0 | Stereo |
| 1 | 1 | 2 channel |

| Bit 3 | Bit 4 | |
|---|---|---|
| 0 | 1 | Rated for youth |
| 0 | 0 | Not rated for youth |
| 1 | 0 | |
| 1 | 1 | |

Additional VPS information

| VPS Bit No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DZ 16 Word No. | 11 | | | | | | | | 12 | | | | | | | | 13 | | | | | | | | 14 | | | | | | | |
| DZ 16 Bit No. | 1 | | | | | | | 8 | 1 | | | | | | | 8 | 1 | | | | | | | 8 | 1 | | | | | | | 8 |
| Binary code significance | | | M | | | | L | M | | | L | M | | | | L | M | | | | | L | M | | | L | M | | | | | L |
| Regular label | Address range | | Day binary | | | | | Month binary | | | | Hour binary | | | | | Minute binary | | | | | | Country binary | | | | Program source binary | | | | | |
| | | | System status code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special system codes | A | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | N | . | . | N | P | . | . | . | . | P |
| Blank code | A | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | N | . | . | N | P | . | . | . | . | P |
| Interruption code | A | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | N | . | . | N | P | . | . | . | . | P |

The 2-channel-status is coded 11 at the studio side; 00 has to be considered at the receiving side in special cases only.

M = MSB
L = LSB

A = Actual address range code
N = Actual country code
P = Actual program source code

Fig. 2 Data format of additional information in data line 16

## GLOSSARY OF ABBREVIATIONS

| | |
|---|---|
| **A/C** | : Audio/Control |
| **ACC** | : Automatic Colour Control |
| **A.E** | : Audio Erase |
| **AFC** | : Automatic Frequency Control |
| **AFT-D** | : Automatic Fine Tuning Door Switch |
| **AGC** | : Automatic Gain Control |
| **AL** | : After Load |
| **AMP** | : Amplifier |
| **ANT** | : Antenna |
| **A-PB** | : Audio-Playback |
| **A-REC** | : Audio-Recording |
| **ALC** | : Automatic Level Control |
| **B-FS** | : Brake Forward Search |
| **B-RS** | : Brake Reverse Search |
| **BPF** | : Band-Pass Filter |
| **B/W** | : Black and White |
| **BS** | : Band SW |
| **CASS** | : Cassette |
| **CP** | : Capstan |
| **CP-FG** | : Capstan-Frequency Generator |
| **CP-F/R** | : Capstan-Forward/Reverse |
| **CP-M** | : Capstan-Motor |
| **CONV** | : Converter |
| **CTL** | : Control |
| **C-LAMP** | : Cassette Lamp |
| **C-ILAMP** | : Cassette Indicator Lamp |
| **CE** | : Chip Enable |
| **$\overline{\text{CE}}$** | : Not Chip Enable |
| **CK** | : Clock |
| **CL** | : Clear |
| **CNT** | : Counter |
| **CP R-R** | : Capstan Reverse Rotation |
| **CS-1** | : Cassette Switch 1 |
| **CS-2** | : Cassette Switch 2 |
| **DAL** | : Delay-After Loading |
| **DEMOD** | : Demodulator |
| **DET** | : Detector |
| **DL** | : Delay Line |
| **DL-REV** | : During Reverse |
| **DL-FWD** | : During Forward |
| **DOC** | : Drop Out Compensator |
| **DL-SL** | : During Slow |
| **DL-$\overline{\text{SS}}$** | : During Not Speed Search |
| **DOP** | : Drop Out Pulse |
| **EF** | : Emitter Follower |
| **EMPHA** | : Emphasis |
| **EQ** | : Equalizer |
| **EE** | : Electronic-Electronic |
| **ES** | : End Sensor |
| **FE-H** | : Full Erase Head |
| **FF** | : Fast Forward |
| **FG** | : Frequency Generator |
| **FL-SW** | : Front Loading SW |
| **FLM** | : Front Loading Motor |
| **F/R-SW** | : FF/Rewind Switch |
| **F/R** | : Forward/Reverse |
| **FS** | : Forward Search |
| **G** | : Ground |
| **HE** | : Hall Element |
| **H-LED** | : Humidity-LED |
| **H-SENS** | : Humidity-Sensor |
| **HPF** | : High-Pass Filter |
| **LIM** | : Limiter |
| **LPF** | : Low-Pass Filter |
| **LM** | : Loading Motor |
| **MDA** | : Motor Drive Amplifier |
| **MC** | : Mechanical Control |
| **MIC** | : Microphone |
| **MOD** | : Modulator |
| **$\overline{\text{N}}$** | : Not Normal |
| **OPE** | : Operation |
| **OSC** | : Oscillator |
| **O-PWV** | : ON/OFF Command from Remote Decorder |
| **PB** | : Play Back |
| **PG** | : Pulse Generator |
| **P/R-SW** | : P.B/REC-SW |
| **PCB** | : Printed Circuit Board |
| **PIC** | : Picture Control |
| **P/R** | : Play/Record |
| **PSC** | : Pulse swallow control |
| **PWT-SET** | : Power TV Set |
| **PWV** | : ON/OFF Command to B + Switching Circuit |
| **REC** | : Recording |
| **REF** | : Reference |
| **RIS** | : Record Inhibit Switch |
| **REW** | : Rewind |
| **REG** | : Regulator |
| **RS** | : Reverse Search |
| **REC-2** | : Record Command for the Fine Editing Circuit |
| **R-FS** | : Reel Drive Forward Search |
| **R-P/R** | : Reel Drive Play/Record |
| **S/AL** | : Stop After Load |
| **SL** | : Slow |
| **SLOCK** | : Slow OK |
| **S/P** | : Still/Pause |
| **SS** | : Start Sensor |
| **SRV-REC** | : Servo Record |
| **$\overline{\text{SS}}$** | : Not Speed Search |
| **S-STOP** | : Stop Command |
| **STOK** | : Still OK |
| **STW** | : Stop Watch |
| **SENS** | : Sensor |
| **STBY** | : Stand By |
| **TM** | : Take up Motor |
| **T-REC** | : Timer-Record |
| **T.P** | : Test Point |
| **TR** | : Transistor |
| **TU-P** | : Tuner-Power |
| **UL** | : Unload |
| **VS** | : Voltage Synthesizer |
| **V.SYNC** | : Vertical Sync |
| **VCO** | : Voltage Controlled Oscillator |
| **VXO** | : Variable Crystal Oscillator |
| **W/D** | : White/Dark |
| **X'OSC** | : Crystal Oscillator |
| **Y/C** | : Luminance/Chrominance |

# CHIP PARTS REPLACEMENT

## CHIP PARTS REPLACEMENT

Some resistors, shorting jumpers (0Ω resistor), ceramic capacitors, transistors and diodes are chip parts which are used for certain circuit elements. When replacing these parts, note the following cautions.

### Cautions:

A. Use fine tipped, well insulated soldering pencil (iron), about 30 watts, and tweezers.
B. Melt the solder and remove the Chip Parts carefully not to tear off the copper foil of the printed circuit board.
C. Discard removed chips; do not reuse them.
D. Do not apply heat for more than 3 seconds to new chip Parts.
E. Avoid using a rubbing stroke when soldering.
F. Take care not to scratch, or damage the Chip Parts when soldering.
G. Supplementary cementing is not required.

### 1 Removal of Chip Parts (Resistors, capacitors, etc.)

A. Grasp the part with tweezers. Melt the solder at both sides alternately, remove one side of the part with a twisting motion.
B. Melt the solder at the other side and remove the part.

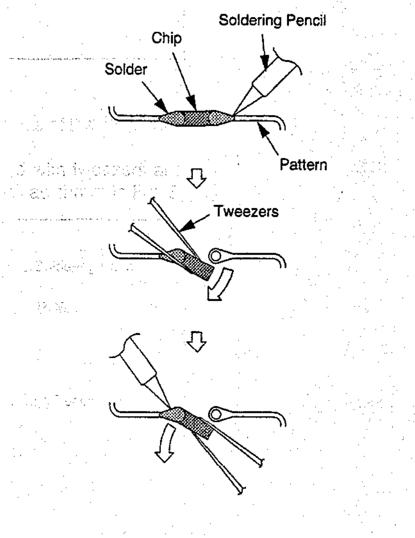


Fig. 1

### 2 Removal of Chip Parts (Transistors)

A. Melt the solder of one lead. Lift the side of that lead upward.
B. Simultaneously melt the solder of the two remaining leads and lift the part.

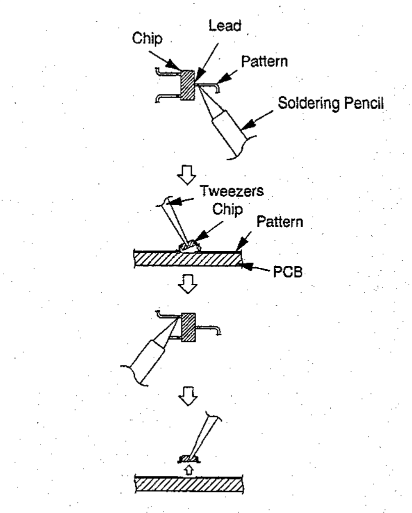


Fig. 2

### 3 Replacement

A. Presolder the contact points of the circuit pattern.
B. Press the part downward with tweezers and apply the soldering pencil as shown in Fig. 3.

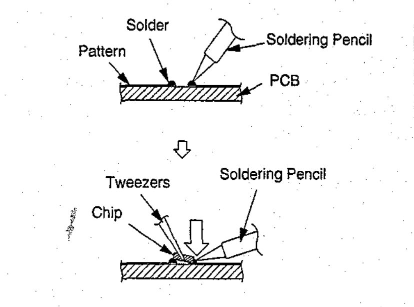
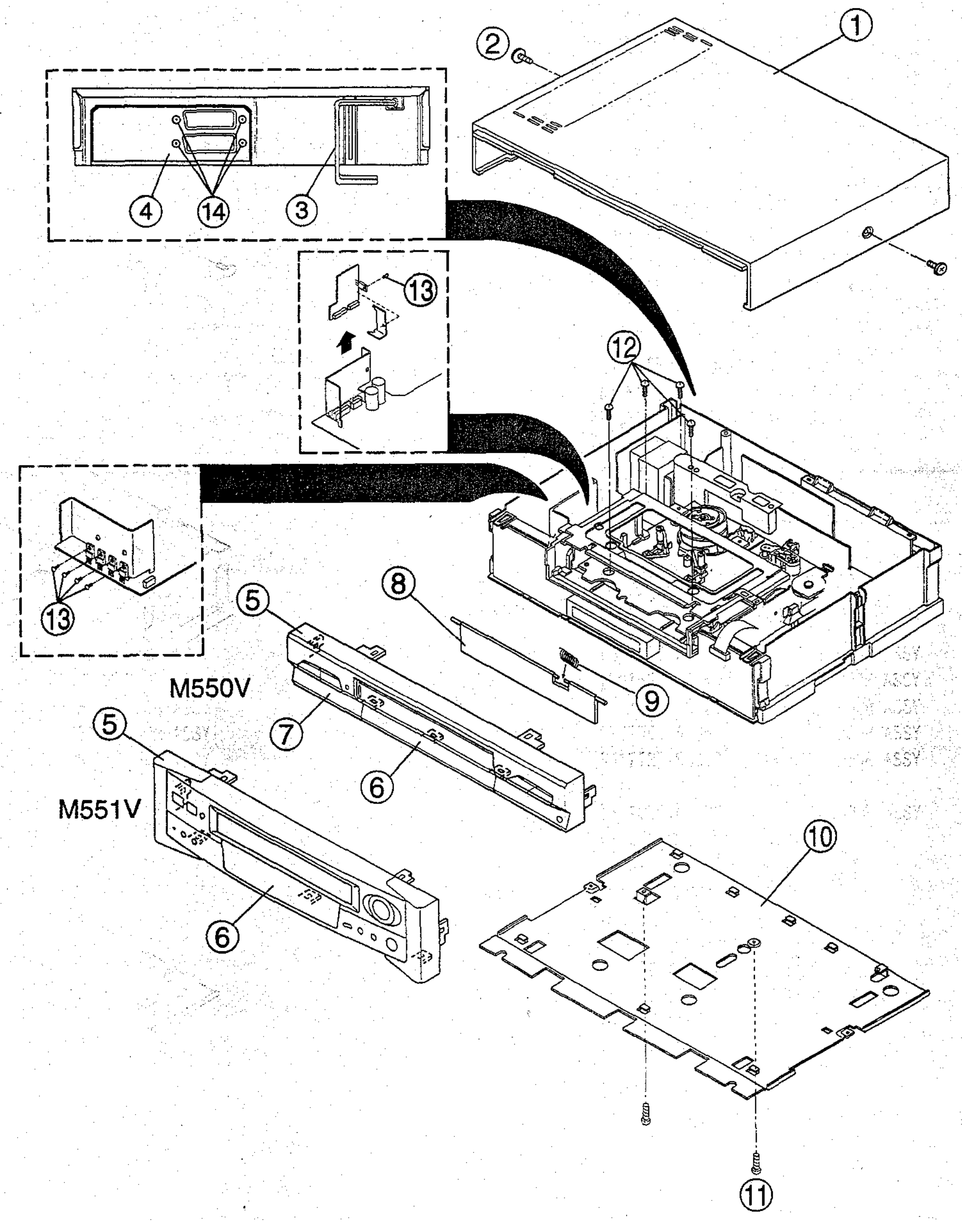


Fig. 3

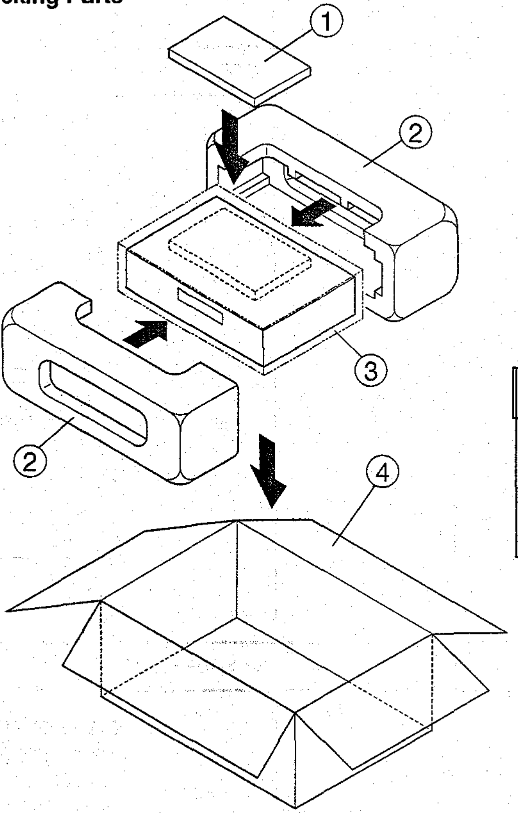
# PARTS LIST

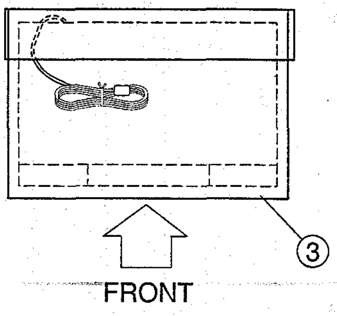
## 1. CABINET ASSEMBLY



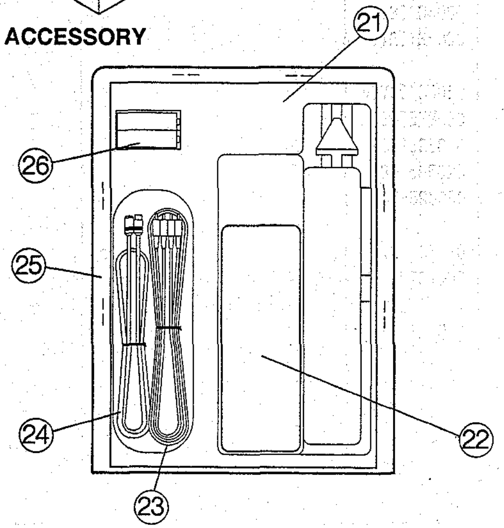
| ITEM NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| CABINET ASSEMBLY | | | |
| 1 | 968C040002 | TOP COVER ASSY | |
| 2 | 669D223080 | SCREW | 3X10 BLK |
| 3 | 246C149040 | AC POWER CORD | [551VG] |
| 3 | 246C167030 | AC POWER CORD | [550VB] |
| 3 | 246C167040 | AC POWER CORD | [551VB, 551VIR] |
| 3 | 246C149080 | AC POWER CORD | [551VE, 551VG, 551VY] |
| 4 | 761B283010 | COVER ANTENNA | [550VB, 551VIR] |
| 4 | 761B283020 | COVER ANTENNA | [551VB] |
| 4 | 761B283040 | COVER ANTENNA | [551VE, 551VY] |
| 4 | 761B283030 | COVER ANTENNA | [551VG] |
| 5 | 968B033005 | FRONT UNIT | [550VB] |
| 5 | 968B034015 | FRONT UNIT | [551VB] |
| 5 | 968B034017 | FRONT UNIT | [551VE] |
| 5 | 968B034019 | FRONT UNIT | [551VG] |
| 5 | 968B034018 | FRONT UNIT | [551VIR] |
| 5 | 968B034016 | FRONT UNIT | [551VY] |
| 6 | 702B932010 | PANEL TIMER | [550VB] |
| 6 | 702C156020 | PANEL TIMER | [551VB, 551VIR] |
| 6 | 702C156010 | PANEL TIMER | [551VE, 551VG, 551VY] |
| 7 | 752C163030 | DOOR PANEL ASSY | [550VB] |
| 8 | 752C162040 | CASSETTE DOOR ASSY | [550VB] |
| 8 | 752C162080 | CASSETTE DOOR ASSY | [551VB] |
| 8 | 752C162020 | CASSETTE DOOR ASSY | [551VE] |
| 8 | 752C162050 | CASSETTE DOOR ASSY | [551VG] |
| 8 | 752C164010 | CASSETTE DOOR ASSY | [551VIR] |
| 8 | 752C162090 | CASSETTE DOOR ASSY | [551VY] |
| 9 | 572D385010 | SPRING F/L | |
| 10 | 590A407010 | PANEL BOTTOM | |
| 11 | 669D220030 | SCREW | 3X10 46LA005 |
| 12 | 669D221040 | SCREW | 4X12 46LA005 |
| 13 | 669D222090 | SCREW | 3X10 46LA005 |
| 14 | 669D359040 | SCREW | 3X12 |

## 2. Packing Parts





**ACCESSORY**



| ITEM NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| | | PACKING PARTS | |
| 1 | ---------- | ACCESSORY | |
| 2 | 803A403010 | PACKING CUSHION | |
| 3 | ---------- | POLYETHYLENE SHEET | |
| 4 | 802B510080 | PACKING CASE | [550VB] |
| 4 | 802B510020 | PACKING CASE | [551VB] |
| 4 | 802B510010 | PACKING CASE | [551VE] |
| 4 | 802B510030 | PACKING CASE | [551VG] |
| 4 | 802B510050 | PACKING CASE | [551VIR] |
| 4 | 802B510040 | PACKING CASE | [551VY] |
| | | ACCESSORY | |
| 21 | 872C134050 | INSTRUCTION BOOK | [550VB] |
| 21 | 872C134090 | INSTRUCTION BOOK | [551VB] |
| 21 | 872C134070 | INSTRUCTION BOOK | [551VE] |
| 21 | 872C134080 | INSTRUCTION BOOK | [551VG] |
| 21 | 872C135000 | INSTRUCTION BOOK | [551VIR] |
| 21 | 872C134060 | INSTRUCTION BOOK | [551VY] |
| 22 | 939P578060 | REMOTE HAND UNIT | [550VB] |
| 22 | 939P595010 | REMOTE HAND UNIT | [551VB, 551VIR] |
| 22 | 939P595020 | REMOTE HAND UNIT | [551VE, 551VY] |
| 22 | 939P595030 | REMOTE HAND UNIT | [551VG] |
| 23 | 242C938010 | CABLE PHONO | 2P R&W L=1.5m [551VE, 551VG] |
| 24 | 242D231030 | CABLE | 1.5m<br>[550VB, 551VB, 551VE, 551VIR, 551VY] |
| 24 | 243C120010 | CABLE | [551VG] |
| 25 | 829B013030 | PACKING PACK | ACCESSORY [550VB, 551VB, 551VIR] |
| 25 | 829B013040 | PACKING PACK | ACCESSORY [551VE, 551VY] |
| 25 | 829B013070 | ACCESSORY PACK | [551VG] |
| 26 | ---------- | BATTERY | |

# ELECTRICAL PARTS

## TEGRATED CIRCUITS

| YMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C101 | 270P184010 | IC | M52318SP |
| C102 | 266P192010 | IC | LA7910 [3, 4, 5, 6] |
| C103 | 272P654010 | IC | M51497L [3, 4, 6] |
| IC201 | 270P183010 | IC | BA7184S |
| IC2A0 | 270P246010 | IC | LA7449M |
| IC2A1 | 270P247010 | IC | LC89970M |
| IC2601 | 270P167020 | IC | LA7156-S [3, 4, 6] |
| IC2602 | 270P067010 | IC | BA7645N |
| IC2603 | 270P046010 | IC | BA7644AN |
| IC2604 | 270P046010 | IC | BA7644AN |
| IC2605 | 270P201010 | IC | LA7151 [3, 4, 6] |
| IC2606 | 270P201010 | IC | LA7151 [3, 4, 6] |
| IC301 | 270P601010 | IC | BA7746FS |
| IC3A0 | 272P234010 | IC | LA7295 |
| IC3000 | 270P271010 | IC | AN3967NFBQ |
| IC3001 | 266P419010 | IC | M5223P |
| IC4A0 | 274P602010 | IC | MN67492MSB5 |
| IC4A1 | 272P237010 | IC | LA6324N |
| IC501 | 274P573010 | IC | M35013-050SP |
| IC551 | 274P672010 | IC | SDA5649 [2, 3, 4, 5] |
| IC571 | 274P677010 | IC | M37470M4-526SP [2] |
| IC5A0 | 274P676030 | IC | M38185ME-097FP[1, 2, 5] |
| IC5A0 | 274P676010 | IC | M38185ME-098P [3] |
| IC5A0 | 274P676020 | IC | M38185ME-096FP [4, 6] |
| IC5A1 | 263P593010 | IC | CAT35C104P |
| IC5A2 | 272P235010 | IC | TA7291S |
| IC5A4 | 266P010020 | IC | μPC574J-K |
| IC5A5 | 270P070010 | IC | AT93C56-10PC [2, 5] |
| IC5A5 | 263P593010 | IC | CAT35C104P [4] |
| IC700 | 270P272010 | IC | TDA9821 [3, 4, 6] |
| IC701 | 270P001010 | IC | TDA9840 [3, 4, 6] |
| IC7A0 | 270P273010 | IC | SAA7283GP [1, 2, 3, 5] |
| IC8D0 | 274P561010 | IC | μPD16311GC-AB6 |
| IC9A0 | 272P237010 | IC | LA6324N |

## RANSISTORS

| YMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 101 | 260P874010 | CHIP TRANSISTOR | 2SC3082K-P, Q |
| Q 102 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 103 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 106 | 260P808010 | CHIP TRANSISTOR | DTC114EK [3, 4, 6] |
| Q 107 | 260P807010 | CHIP TRANSISTOR | UN2212 [3, 4, 6] |
| Q 108 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 109 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 4, 6] |
| Q 110 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 4, 6] |
| Q 111 | 260P874010 | CHIP TRANSISTOR | 2SC3082K-P, Q [3, 5] |
| Q 201 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 202 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 205 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 207 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 208 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 260 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 261 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 262 | 260P807010 | CHIP TRANSISTOR | UN2212 |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 2A0 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A1 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 2A2 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A3 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A4 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A5 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A7 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2A8 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 2A9 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 2G0 | 260P806010 | CHIP TRANSISTOR | DTA124EK [3, 4, 5, 6] |
| Q 2G1 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2G2 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 2G4 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 2G5 | 260P807010 | CHIP TRANSISTOR | UN2212 [1, 2] |
| Q 2G6 | 260P806010 | CHIP TRANSISTOR | DTA124EK [1, 2] |
| Q 2G7 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 2G9 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 2H0 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 2H1 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 2R0 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [1, 2, 5] |
| Q 2R1 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [1, 2, 5] |
| Q 2601 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 2602 | 260P807010 | CHIP TRANSISTOR | UN2212 [3, 4, 6] |
| Q 2603 | 260P807010 | CHIP TRANSISTOR | UN2212 [3, 4, 6] |
| Q 2604 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 4, 6] |
| Q 3A0 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 3A1 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 3A2 | 260P629060 | TRANSISTOR | 2SC3331-S |
| Q 3100 | 260C676040 | TRANSISTOR | 2SC3311A-R, S |
| Q 3101 | 260C676040 | TRANSISTOR | 2SC3311A-R, S |
| Q 3102 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 3252 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 3500 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 4, 5, 6] |
| Q 3501 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 4, 5, 6] |
| Q 4A1 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 4A2 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 4A3 | 260P804030 | CHIP TRANSISTOR | 2SC3052-G |
| Q 4A4 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 4A5 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 4A6 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 4C8 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D |
| Q 501 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 503 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 504 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 505 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F [3, 4, 6] |
| Q 506 | 260P804030 | CHIP TRANSISTOR | 2SC3052-G |
| Q 507 | 260P804030 | CHIP TRANSISTOR | 2SC3052-G |
| Q 571 | 260P562040 | TRANSISTOR | 2SA952-K [2] |
| Q 581 | 260P562040 | TRANSISTOR | 2SA952-K [2] |
| Q 5A1 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 5A2 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 5A3 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 5A6 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 5A7 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 5A8 | 260P807010 | CHIP TRANSISTOR | UN2212 |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 5A9 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 5B0 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 5B1 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 5B2 | 260P804030 | CHIP TRANSISTOR | 2SC3052-G |
| Q 5B3 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F [3, 6] |
| Q 5B4 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 5B6 | 260P807010 | CHIP TRANSISTOR | UN2212 |
| Q 5B7 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 5B8 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 5C4 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 5C5 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 5D6 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 5E1 | 268P014030 | PHOTO TRANSISTOR | PN205L-(NC).MI2 |
| Q 5E2 | 268P014030 | PHOTO TRANSISTOR | PN205L-(NC).MI2 |
| Q 5E3 | 268P059010 | PHOTO INTERRUPTER | RPI-244 |
| Q 5E4 | 268P059010 | PHOTO INTERRUPTER | RPI-244 |
| Q 5F0 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5F1 | 260P806010 | CHIP TRANSISTOR | DTA124EK |
| Q 701 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [3, 4, 6] |
| Q 702 | 260P806010 | CHIP TRANSISTOR | DTA124EK [3, 4, 6] |
| Q 703 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [3, 4, 6] |
| Q 704 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [3, 4, 6] |
| Q 7A0 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [1, 2, 3, 5] |
| Q 7A2 | 260P805030 | CHIP TRANSISTOR | 2SC3053-D [1, 2, 3, 5] |
| Q 7A3 | 260P807010 | CHIP TRANSISTOR | UN2212 [1, 2, 3, 5] |
| Q 901 | 260C628010 | TRANSISTOR | 2SA1619A-Q |
| Q 902 | 260P630010 | TRANSISTOR | 2SD2012 |
| Q 903 | 260P630010 | TRANSISTOR | 2SD2012 |
| Q 904 | 260P640030 | TRANSISTOR | 2SD1762-F |
| Q 907 | 260P560030 | TRANSISTOR | 2SA933S-R, F |
| Q 908 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 910 | 260P802020 | CHIP TRANSISTOR | 2SA1235-F |
| Q 911 | 260P438010 | TRANSISTOR | 2SD1273-Q |
| Q 913 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 9A1 | 260P438020 | TRANSISTOR | 2SD1273-P |
| Q 9A5 | 260P613010 | TRANSISTOR | 2SC4208A |
| Q 9B2 | 260P630010 | TRANSISTOR | 2SD2012 [3, 4, 6] |

## DIODES

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 5B1 | 264P585010 | LIGHT EMITTING DIODE | LN59L.MI |
| D 8F0 | 264P621010 | LIGHT EMITTING DIODE | SEL2210R TP2 |
| D 8P0 | 264P634010 | LIGHT EMITTING DIODE | SLR-932A-7 [2] |

## FILTERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| CF101 | 296P014030 | CERAMIC FILTER | SFE-6.0MHz [1, 2, 5] |
| CF101 | 296P014090 | CERAMIC FILTER | SFE-5.5MC2 [3, 4, 6] |
| CF102 | 296P024040 | CERAMIC TRAP | TPS6.0MB [1, 2, 5] |
| CF102 | 296P104010 | CERAMIC TRAP | EFC-S3F01W3A [3, 4, 6] |
| CF103 | 299P051050 | CERAMIC RESONATOR | CSB500F9 [3, 4, 6] |
| CF104 | 296P143020 | CERAMIC DISCRIMINATOR | CDSH6.0ME65 [1, 2, 5] |
| CF104 | 296P143010 | CERAMIC DISCRIMINATOR | CDSH5.5ME65 [3, 4, 6] |
| CF701 | 296P071020 | CERAMIC FILTER | [3, 4, 6] |
| ○CF702 | 296P071010 | CERAMIC FILTER | [3, 4, 6] |
| CF7A0 | 296P131010 | CERAMIC FILTER | -S5R5MW5 [3] |
| CF7A1 | 296P132010 | CERAMIC FILTER | -S6R0MW5 [1, 2, 5] |
| SF101 | 296P141020 | SAW FILTER | SAF39.5MVA80Z [1, 2] |
| SF101 | 296P141010 | SAW FILTER | SAF38.9MVB85Z [3, 4, 5, 6] |
| SF102 | 296P134020 | SAW FILTER | SAF32.9MC70Z [1, 2] |
| SF102 | 296P134010 | SAW FILTER | SAF33.0MC70Z [3, 4, 6] |
| ○SF102 | 296P134040 | SAW FILTER | SAF32.9MCA70Z [5] |

## DELAY LINES

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 101 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 102 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 2A0 | 264P807010 | DIODE | DAP202K HVN21C |
| D 2A1 | 264P568010 | DIODE | 1SS252 |
| D 2A2 | 264P568010 | DIODE | 1SS252 |
| D 2A3 | 264P568010 | DIODE | 1SS252 [1, 2, 5] |
| D 2G0 | 264P568010 | DIODE | 1SS252 |
| D 2G1 | 264P568010 | DIODE | 1SS252 |
| D 2G2 | 264P568010 | DIODE | 1SS252 |
| D 2G3 | 264P568010 | DIODE | 1SS252 [1, 2] |
| D 2G4 | 264P568010 | DIODE | 1SS252 [3, 4, 5, 6] |
| D 2G8 | 264P568010 | DIODE | 1SS252 |
| D 2601 | 264P808010 | CHIP DIODE | DAN202K [3, 4, 6] |
| D 2602 | 264P808010 | CHIP DIODE | DAN202K [3, 4, 6] |
| D 2605 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 2606 | 264P568010 | DIODE | 1SS252 |
| D 2609 | 264P568010 | DIODE | 1SS252 |
| D 2610 | 264P568010 | DIODE | 1SS252 |
| D 2611 | 264P568010 | DIODE | 1SS252 |
| D 2612 | 264P568010 | DIODE | 1SS252 |
| D 2613 | 264P568010 | DIODE | 1SS252 |
| D 2614 | 264P826010 | CHIP DIODE | DA204K |
| D 2621 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 2623 | 264P826010 | CHIP DIODE | DA204K |
| D 2624 | 264P826010 | CHIP DIODE | DA204K |
| D 2625 | 264P826010 | CHIP DIODE | DA204K |
| D 2641 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 2645 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 2646 | 264P568010 | DIODE | 1SS252 [3, 4, 6] |
| D 3A0 | 264P568010 | DIODE | 1SS252 |
| D 3A5 | 264P568010 | DIODE | 1SS252 |
| D 3400 | 264P568010 | DIODE | 1SS252 |
| D 3401 | 264P568010 | DIODE | 1SS252 |
| D 3402 | 264P568010 | DIODE | 1SS252 |
| D 3403 | 264P568010 | DIODE | 1SS252 |
| ○D 3406 | 264P483030 | DIODE | RD4.7FB1 |
| D 4A0 | 264P568010 | DIODE | 1SS252 |
| D 4A1 | 264P568010 | DIODE | 1SS252 |
| D 501 | 264P568010 | DIODE | 1SS252 |
| D 502 | 264P568010 | DIODE | 1SS252 |
| D 5A1 | 264P342070 | DIODE | HZ4C2 |
| D 5A3 | 264P568010 | DIODE | 1SS252 |
| D 5A5 | 264P568010 | DIODE | 1SS252 |
| D 5A7 | 264P568010 | DIODE | 1SS252 |
| D 5A8 | 264P568010 | DIODE | 1SS252 |
| D 5B2 | 264P568010 | DIODE | 1SS252 |
| D 5B3 | 264P568010 | DIODE | 1SS252 |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 5B4 | 264P568010 | DIODE | 1SS252 |
| D 7C0 | 264P675010 | DIODE | BB405B [1, 2, 3, 5] |
| D 7C1 | 264P568010 | DIODE | 1SS252 [1, 2, 3, 5] |
| D 7C2 | 264P568010 | DIODE | 1SS252 [1, 2, 3, 5] |
| D 8A1 | 264P568010 | DIODE | 1SS252 |
| D 8A2 | 264P568010 | DIODE | 1SS252 |
| D 8A3 | 264P568010 | DIODE | 1SS252 |
| D 8A4 | 264P568010 | DIODE | 1SS252 [2, 3, 4, 5] |
| D 8B0 | 264P568010 | DIODE | 1SS252 |
| D 8B1 | 264P568010 | DIODE | 1SS252 |
| D 8B2 | 264P568010 | DIODE | 1SS252 |
| D 8B3 | 264P568010 | DIODE | 1SS252 |
| D 8J0 | 264P568010 | DIODE | 1SS252 [2, 3, 4] |
| D 8J1 | 264P568010 | DIODE | 1SS252 [2] |
| D 8J2 | 264P568010 | DIODE | 1SS252 [2, 3, 4, 5] |
| D 8K0 | 264P568010 | DIODE | 1SS252 [1, 2, 3] |
| D 8K1 | 264P568010 | DIODE | 1SS252 [3] |
| D 8L1 | 264P568010 | DIODE | 1SS252 [3] |
| D 8M0 | 264P568010 | DIODE | 1SS252 [3] |
| D 8M1 | 264P568010 | DIODE | 1SS252 [3] |
| D 8M3 | 264P568010 | DIODE | 1SS252 [2, 3, 4, 5, 6] |
| D 8Z1 | 264P484080 | DIODE | RD6. 2FB3 |
| D 901 | 264P294010 | DIODE | EM 1Z |
| D 902 | 264P569010 | DIODE | G4DL-6140 FORMING |
| D 903 | 264P569010 | DIODE | G4DL-6140 FORMING |
| D 904 | 264P294010 | DIODE | EM 1Z |
| D 905 | 264P294010 | DIODE | EM 1Z |
| D 906 | 264P569010 | DIODE | G4DL-6140 FORMING |
| D 907 | 264P569010 | DIODE | G4DL-6140 FORMING |
| D 908 | 264P294010 | DIODE | EM 1Z |
| D 909 | 264P500020 | DIODE | EM01Z |
| D 910 | 264P500020 | DIODE | EM01Z |
| D 911 | 264P104040 | DIODE | HZ30-2 |
| D 920 | 264P568010 | DIODE | 1SS252 |
| D 921 | 264P568010 | DIODE | 1SS252 |
| D 922 | 264P568010 | DIODE | 1SS252 |
| D 9A1 | 264P488040 | DIODE | RD13FB3 |
| D 9B2 | 264P484020 | DIODE | RD5. 6FB1 |
| D 9B3 | 264P452030 | DIODE | HZ5C3 |
| D 9C2 | 264P568010 | DIODE | 1SS252 |
| D 9C5 | 264P487080 | DIODE | RD12FB2 [3, 4, 6] |

## OILS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| L 01 | 325C121030 | PEAKING COIL | 10 μH-K |
| L 101 | 325C122050 | PEAKING COIL | 100 μH-K |
| L 102 | 325C165020 | PEAKING COIL | 1. 2 μH-J [1, 2, 4, 5, 6] |
| L 102 | 325C165050 | PEAKING COIL | 2. 2 μH-J [3] |
| L 103 | 325C170050 | PEAKING COIL | 2. 2 μH-K SHIELD |
| L 104 | 325C165040 | PEAKING COIL | 1. 8 μH-J |
| L 105 | 325C121040 | PEAKING COIL | 12 μH-K |
| L 106 | 323P196010 | VIF COIL | M7-T1SA-4091-5 |
| L 107 | 325C167020 | PEAKING COIL | 56 μH-J [1, 2] |
| L 107 | 325C167000 | PEAKING COIL | 39 μH-J [3, 4, 6] |
| L 107 | 325C167010 | PEAKING COIL | 47 μH-J [5] |
| L 108 | 323P196020 | VIF COIL | M7-T1SA-4092-1 |
| L 109 | 325C166020 | PEAKING COIL | 8. 2 μH-J [1, 2, 5] |
| L 109 | 325C166000 | PEAKING COIL | 5. 6 μH-J [3, 4, 6] |
| L 112 | 325C165020 | PEAKING COIL | 1. 2 μH-J [3, 5] |
| L 113 | 325C162050 | PEAKING COIL | 100 μH-K [3] |
| L 113 | 325C167050 | PEAKING COIL | 100 μH-J [5] |
| L 201 | 321C112050 | RF COIL | 100 μH-K |
| L 202 | 325C166070 | PEAKING COIL | 22 μH-J |
| L 203 | 325C167040 | PEAKING COIL | 82 μH-J |
| L 204 | 325C167070 | PEAKING COIL | 150 μH-J |
| L 205 | 325C166050 | PEAKING COIL | 15 μH-J |
| L 2A0 | 325C166090 | PEAKING COIL | 33 μH-J |
| L 2A1 | 325C166060 | PEAKING COIL | 18 μH-J |
| L 2A2 | 325C167080 | PEAKING COIL | 180 μH-J |
| L 2A3 | 325C166060 | PEAKING COIL | 18 μH-J |
| L 2A6 | 325C162050 | PEAKING COIL | 100 μH-K [1, 3] |
| L 2A6 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 2G0 | 321C112050 | RF COIL | 100 μH-K |
| L 2G1 | 321C112050 | RF COIL | 100 μH-K |
| L 2G4 | 325C162050 | PEAKING COIL | 100 μH-K [1, 3] |
| L 2G4 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 2G5 | 325C167070 | PEAKING COIL | 150 μH-J |
| L 2G6 | 325C166090 | PEAKING COIL | 33 μH-J |
| L 2G7 | 325C166090 | PEAKING COIL | 33 μH-J |
| L 2T0 | 325C166070 | PEAKING COIL | 22 μH-J |
| L 2T1 | 325C167050 | PEAKING COIL | 100 μH-J |
| L 2301 | 325C243010 | CHIP COIL | 330 μH-K [3, 4, 6] |
| L 2302 | 325C243010 | CHIP COIL | 330 μH-K [3, 4, 6] |
| L 2303 | 325C243010 | CHIP COIL | 330 μH-K |
| L 2304 | 325C243010 | CHIP COIL | 330 μH-K |
| L 2601 | 325C162050 | PEAKING COIL | 100 μH-K [3] |
| L 2601 | 325C167050 | PEAKING COIL | 100 μH-J [4, 6] |
| L 2602 | 325C162050 | PEAKING COIL | 100 μH-K [1, 3] |
| L 2602 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 2603 | 325C112050 | PEAKING COIL | 100 μH-K [3, 4, 6] |
| L 2604 | 325C112050 | PEAKING COIL | 100 μH-K [1, 2, 5] |
| L 301 | 325C102050 | PEAKING COIL | 100 μH-K |
| L 3A0 | 321C114080 | RF COIL | 8200 μH-J |
| L 3A1 | 321C113070 | RF COIL | 1000 μH-K |
| L 4A7 | 325C262050 | PEAKING COIL | 100 μH-K [1] |
| L 4A7 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 4A7 | 325C162050 | PEAKING COIL | 100 μH-K [3] |
| L 4A8 | 325C121030 | PEAKING COIL | 10 μH-K |
| L 501 | 325C262050 | PEAKING COIL | 100 μH-K [1] |
| L 501 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 501 | 325C162050 | PEAKING COIL | 100 μH-K [3] |
| L 502 | 325C166050 | PEAKING COIL | 15 μH-J |
| L 503 | 325C262050 | PEAKING COIL | 100 μH-K [1] |
| L 503 | 325C167050 | PEAKING COIL | 100 μH-J [2, 4, 5, 6] |
| L 503 | 325C162050 | PEAKING COIL | 100 μH-K [3] |
| L 504 | 325C166080 | PEAKING COIL | 27 μH-J [3, 4, 6] |
| L 551 | 325C122050 | PEAKING COIL | 100 μH-K [2, 3, 4, 5] |
| L 571 | 325C167050 | PEAKING COIL | 100 μH-J [2] |
| L 702 | 325C106030 | PEAKING COIL | 10 μH-J [3, 4, 6] |
| L 703 | 325C106030 | PEAKING COIL | 10 μH-J [3, 4, 6] |
| ○L 708 | 321C114050 | RF COIL | 4700 μH-J [3, 4, 6] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| L 7A0 | 325C107010 | PEAKING COIL | 47 μH-J [1, 2, 3, 5] |
| L 7A1 | 325C106050 | PEAKING COIL | 15 μH-J [1, 2, 5] |
| L 7A3 | 325C106030 | PEAKING COIL | 10 μH-J [3, 4, 6] |
| L 7C0 | 325C106060 | PEAKING COIL | 18 μH-J [1, 2, 3, 5] |
| L 7C1 | 325C107050 | PEAKING COIL | 100 μH-J [1, 2, 3, 5] |
| L 7C2 | 325C107050 | PEAKING COIL | 100 μH-J [1, 2, 3, 5] |
| L 7C3 | 325C107050 | PEAKING COIL | 100 μH-J [1, 2, 3, 5] |
| L 7C4 | 325C107050 | PEAKING COIL | 100 μH-J [1, 2, 3, 5] |
| L 8A0 | 325C122050 | PEAKING COIL | 100 μH-K |
| L 901 | 351P038010 | LINE FILTER | ELF-18D290CN |

## TRANSFORMERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| T 3A0 | 409P423030 | AUDIO BIAS OSC | 409P42301/2 |
| ○T 901 | 350P628040 | TRANS POWER | PRI |

## VARIABLE RESISTORS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| VR101 | 127C381000 | VR SEMIFIXED | 1/5W B30kΩ-M |
| VR310 | 127C481020 | VR SEMIFIXED | 1/5W B100kΩ+-25% |
| VR3000 | 127C391010 | VR SEMIFIXED | 1/5W B50kΩ-M [3, 4, 5, 6] |
| VR3001 | 127C391000 | VR SEMIFIXED | 1/5W B30kΩ-M [3, 4, 5, 6] |
| VR3002 | 127C390090 | VR SEMIFIXED | 1/5W B20kΩ-M |
| VR3003 | 127C390080 | VR SEMIFIXED | 1/5W B10kΩ-M |
| VR5A0 | 127C381020 | VR SEMIFIXED | 1/5W B100kΩ-M |
| VR756 | 127C380040 | VR SEMIFIXED | 1/5W B1kΩ-M [3, 4, 6] |

## RESISTORS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 01 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 03 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 04 | 103P401020 | CHIP RESISTOR | 1/10W 82Ω-J [1, 2, 5] |
| R 08 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 11 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 12 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 5, 6] |
| R 16 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 17 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |
| R 101 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J |
| R 102 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J[1, 2, 4, 6] |
| R 102 | 103P402080 | CHIP RESISTOR | 1/10W 1. 8kΩ-J [3, 5] |
| R 103 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 104 | 103P401010 | CHIP RESISTOR | 1/10W 68Ω-J[1, 2, 4, 6] |
| R 104 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [3, 5] |
| R 105 | 103P401010 | CHIP RESISTOR | 1/10W 68Ω-J [3, 5] |
| R 108 | 103P477010 | CHIP RESISTOR | 1/10W 82kΩ-F |
| R 109 | 103P476010 | CHIP RESISTOR | 1/10W 33kΩ-F |
| R 110 | 103P476060 | CHIP METAL | 1/10W 51kΩ-F |
| R 111 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 112 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 113 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 114 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 115 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 118 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F [1, 2] |
| R 118 | 103P470050 | CHIP RESISTOR | 1/10W 150Ω-F [3, 4, 6] |
| R 118 | 103P471030 | CHIP RESISTOR | 1/10W 330Ω-F [5] |
| R 119 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 120 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 128 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [3, 4, 6] |
| R 130 | 103P405090 | CHIP RESISTOR | 1/10W 680kΩ-J[3, 4, 6] |
| R 131 | 103P403050 | CHIP RESISTOR | 1/10W 6. 8kΩ-J[3, 4, 6] |
| R 132 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 6] |
| R 133 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J[3, 4, 6] |
| R 134 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J [3, 4, 6] |
| R 135 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [3, 4, 6] |
| R 136 | 103P405020 | CHIP RESISTOR | 1/10W 180kΩ-J[3, 4, 6] |
| R 142 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J [3, 4, 6] |
| R 143 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [3, 4, 6] |
| R 144 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J[3, 4, 6] |
| R 146 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [3, 4, 6] |
| R 147 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J[3, 4, 6] |
| R 151 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [3, 5] |
| R 152 | 103P401010 | CHIP RESISTOR | 1/10W 68Ω- J [3, 5] |
| R 153 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J [3, 5] |
| R 154 | 103P400090 | CHIP RESISTOR | 1/10W 47Ω-J [3, 5] |
| R 160 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 161 | 103P402080 | CHIP RESISTOR | 1/10W 1. 8kΩ-J |
| R 199 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J [3, 4, 6] |
| R 202 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 205 | 103P405060 | CHIP RESISTOR | 1/10W 390kΩ-J |
| R 206 | 103P476070 | CHIP RESISTOR | 1/10W 56kΩ-F |
| R 207 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 208 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| R 209 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 210 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 211 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 212 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 213 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 214 | 103P402080 | CHIP RESISTOR | 1/10W 1. 8kΩ-J |
| R 215 | 103P473000 | CHIP RESISTOR | 1/10W 1. 6kΩ-F |
| R 216 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 217 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 218 | 103P476000 | CHIP RESISTOR | 1/10W 30kΩ-F |
| R 220 | 103P474080 | CHIP RESISTOR | 1/10W 9. 1K |
| R 221 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 223 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 224 | 103P402080 | CHIP RESISTOR | 1/10W 1. 8kΩ-J |
| R 225 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 260 | 103P473030 | CHIP RESISTOR | 1/10W 2. 2kΩ-F |
| R 261 | 103P473070 | CHIP RESISTOR | 1/10W 3. 3kΩ-F |
| R 262 | 103P473030 | CHIP RESISTOR | 1/10W 2. 2kΩ-F |
| R 263 | 103P473030 | CHIP RESISTOR | 1/10W 2. 2kΩ-F |
| R 264 | 103P477050 | CHIP RESISTOR | 1/10W 120K |
| R 265 | 103P475070 | CHIP RESISTOR | 1/10W 22kΩ-F |
| R 266 | 103P476070 | CHIP RESISTOR | 1/10W 56kΩ-F |
| R 267 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 268 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 269 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 270 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 271 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 2A0 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |

| YMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| 2A1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| 2A2 | 103P473040 | CHIP RESISTOR | 1/10W 2. 4kΩ-F |
| 2A3 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| 2A4 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| 2A6 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| 2A8 | 103P471020 | CHIP RESISTOR | 1/10W 300Ω-F [1, 2, 5] |
| 2A8 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J [3, 4, 6] |
| 2A9 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [1, 2, 5] |
| 2A9 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [3, 4, 6] |
| 2B3 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| 2B4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| 2B5 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| 2B6 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| 2B7 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| 2B8 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| 2B9 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| 2C0 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| 2C1 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| 2C2 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| 2C3 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| 2C4 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| 2C6 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| 2C7 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| 2C8 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| 2D1 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| 2G1 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| 2G2 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| 2G3 | 103P473040 | CHIP RESISTOR | 1/10W 2. 4kΩ-F |
| 2G4 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| 2G6 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| 2G8 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| 2G9 | 103P402080 | CHIP RESISTOR | 1/10W 1. 8kΩ-J |
| 2H0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| 2H1 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| 2H3 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| 2H4 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| 2H5 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| 2H6 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| 2H7 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 2J0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2J1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2J2 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 2J3 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| R 2J4 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2K3 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [1, 2] |
| R 2L0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2L1 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |
| R 2L2 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| R 2M2 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J |
| R 2P1 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 2R1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [1, 2, 5] |
| R 2X0 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2X1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2X2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2X3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2301 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [3, 4, 6] |
| R 2304 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [3, 4, 6] |
| R 2307 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [1, 2, 5] |
| R 2307 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J[3, 4, 6] |
| R 2308 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [1, 2, 5] |
| R 2308 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J [3, 4, 6] |
| R 2309 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2312 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2315 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2316 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2605 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [1, 2, 5] |
| R 2607 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [3, 4, 6] |
| R 2608 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [3, 4, 6] |
| R 2609 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J[3, 4, 6] |
| R 2612 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2613 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2618 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J[3, 4, 6] |
| R 2619 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J [3, 4, 6] |
| R 2620 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 6] |
| R 2621 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 6] |
| R 2622 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J [3, 4, 6] |
| R 2624 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [1, 2, 5] |
| R 2624 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [3, 4, 6] |
| R 2632 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [1, 2, 5] |
| R 2634 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [3, 4, 6] |
| R 2635 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [1, 2, 5] |
| R 2636 | 103P403050 | CHIP RESISTOR | 1/10W 6. 8kΩ-J[3, 4, 6] |
| R 2637 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2638 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [3, 4, 6] |
| R 2640 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) [1, 2, 5] |
| R 301 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 302 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 307 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 308 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 309 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 310 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 311 | 103P400020 | CHIP METAL | 1/10W 12Ω-J |
| R 312 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 3A0 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 3A1 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 3A2 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 3A4 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3A5 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3A6 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 3A7 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3A8 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 3A9 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 3B0 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3B1 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 3B2 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J |
| R 3B3 | 103P473020 | CHIP RESISTOR | 1/10W 2kΩ-F |
| R 3B4 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J |
| R 3B6 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| R 3B7 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3B8 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 3B9 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3C0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3C1 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 3C4 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 3C5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3C6 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 3C7 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3D3 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3D4 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-J |
| R 3000 | 103P471080 | CHIP RESISTOR | 1/10W 510Ω-F |
| R 3001 | 103P471080 | CHIP RESISTOR | 1/10W 510Ω-F |
| R 3002 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3003 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3004 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3005 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3006 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| R 3007 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| R 3008 | 103P405060 | CHIP RESISTOR | 1/10W 390kΩ-J |
| ○R 3009 | 103P479000 | CHIP METAL | 1/10W 510kΩ-F |
| R 3010 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 3011 | 103P475020 | CHIP RESISTOR | 1/10W 13kΩ-F |
| R 3102 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3103 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3106 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 5] |
| R 3106 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [3, 4, 6] |
| R 3107 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 5] |
| R 3107 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [3, 4, 6] |
| R 3109 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J [1, 2, 3, 5] |
| R 3110 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 3, 5] |
| R 3111 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 3, 5] |
| R 3112 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J [3, 4, 6] |
| R 3113 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J [3, 4, 6] |
| R 3114 | 103P403050 | CHIP RESISTOR | 1/10W 6. 8kΩ-J[3, 4, 6] |
| R 3115 | 103P403050 | CHIP RESISTOR | 1/10W 6. 8kΩ-J[3, 4, 6] |
| R 3116 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 3117 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J [1, 2, 5] |
| R 3117 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-J[3, 4, 6] |
| R 3118 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3119 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3120 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 3121 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 3200 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J |
| R 3201 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3203 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 5] |
| R 3203 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [3, 4, 6] |
| R 3258 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 3259 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 3405 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 3406 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 3407 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 3408 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 3409 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 3410 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 3411 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3412 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 3413 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 3421 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 3501 | 103P475020 | CHIP RESISTOR | 1/10W 13kΩ-F |
| R 3504 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 3505 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 3506 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 3900 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |
| R 4A0 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 4A1 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 4A2 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 4A3 | 103P472070 | CHIP RESISTOR | 1/10W 1. 2kΩ-F |
| R 4A4 | 103P472070 | CHIP RESISTOR | 1/10W 1. 2kΩ-F |
| R 4A5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 4A6 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 4A7 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 4A9 | 103P405000 | CHIP RESISTOR | 1/10W 120kΩ-J |
| R 4B0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 4B1 | 103P405000 | CHIP RESISTOR | 1/10W 120kΩ-J |
| R 4B2 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-J |
| R 4B3 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 4B4 | 103P405040 | CHIP RESISTOR | 1/10W 270kΩ-J |
| R 4B5 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J |
| R 4B6 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 4B7 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 4B8 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 4B9 | 103P403050 | CHIP RESISTOR | 1/10W 6. 8kΩ-J |
| R 4C0 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 4C1 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 4C2 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 4C3 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 4C4 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 4C5 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 4C6 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J |
| R 4C7 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J |
| R 4C8 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 4C9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 4D0 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 4D1 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 4D2 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 4D3 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 4D4 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 4D5 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 4D6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 4D7 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 4D8 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 4D9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 4E0 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 4E1 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 4S5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 4S6 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 4S7 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J |
| R 4S9 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 501 | 103P409050 | CHIP RESISTOR | 0. 1W 0Ω (2125) |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 502 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 503 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [3, 4, 6] |
| R 504 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 505 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 506 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 507 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 508 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 509 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 510 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [1, 2, 5] |
| R 510 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [3, 4, 6] |
| R 511 | 103P472070 | CHIP RESISTOR | 1/10W 1.2kΩ-F |
| R 512 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 514 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 515 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 516 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 518 | 103P474030 | CHIP RESISTOR | 1/10W 5.6kΩ-F |
| R 519 | 103P473090 | CHIP RESISTOR | 1/10W 3.9kΩ-F |
| R 520 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 521 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-J |
| R 522 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 551 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [2, 3, 4, 5] |
| R 552 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J [2, 3, 4, 5] |
| R 553 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [2, 3, 4, 5] |
| R 554 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J [2, 3, 4, 5] |
| R 555 | 103P406020 | CHIP METAL | 1/10W 1.2MΩ-J [2, 3, 4, 5] |
| R 556 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J [2, 3, 4, 5] |
| R 557 | 103P406020 | CHIP METAL | 1/10W 1.2MΩ-J [2, 3, 4, 5] |
| R 5A0 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 5A1 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 5A2 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 5A3 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 5A6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5A8 | 103P475010 | CHIP RESISTOR | 1/10W 12kΩ-F |
| R 5B1 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5B4 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 5B5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5B7 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5B9 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 5C0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5C1 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 5C2 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 5C3 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 5C4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 5C5 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 5C6 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 5C8 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 5C9 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 5D6 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 5D7 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5E0 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 5E1 | 103P478020 | CHIP RESISTOR | 1/10W 240kΩ-F |
| R 5E2 | 103P477050 | CHIP RESISTOR | 1/10W 120K |
| R 5E3 | 103P476080 | CHIP RESISTOR | 1/10W 62kΩ-F |
| R 5E4 | 103P476000 | CHIP RESISTOR | 1/10W 30kΩ-F |
| R 5E5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5E6 | 103P475030 | CHIP RESISTOR | 1/10W 15kΩ-F |
| R 5E7 | 103P476070 | CHIP RESISTOR | 1/10W 56kΩ-F |
| R 5E8 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J |
| R 5E9 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 5F0 | 103P405070 | CHIP RESISTOR | 1/10W 470kΩ-J |
| R 5F1 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5F2 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 5F3 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 5F4 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 5F5 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 5F6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 5F7 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 5F8 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 5G2 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 5G3 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 5G4 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 5G5 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 5G6 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 5G7 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 5G8 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 5G9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5H0 | 103P406090 | CHIP METAL | 1/10W 4.7MΩ-K |
| R 5H1 | 103P406090 | CHIP METAL | 1/10W 4.7MΩ-K |
| R 5H3 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 5H4 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 5H6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5H7 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5J0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 6] |
| R 5J1 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [3, 4, 6] |
| R 5J2 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J [3, 4, 6] |
| R 5J3 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J [3, 6] |
| R 5J4 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J [3, 6] |
| R 5K0 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| R 5K4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 5K5 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J [2, 4, 5] |
| R 5K7 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 5L1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 5L2 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 5L5 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 5M0 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 5M1 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 701 | 103P472000 | CHIP RESISTOR | 1/10W 620Ω-F [3, 4, 6] |
| R 702 | 103P472000 | CHIP RESISTOR | 1/10W 620Ω-F [3, 4, 6] |
| R 703 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [3, 4, 6] |
| R 704 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J [3, 4, 6] |
| R 718 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J [3, 4, 6] |
| R 719 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [3, 4, 6] |
| R 720 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [3, 4, 6] |
| R 723 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J [3, 4, 6] |
| R 724 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J [3, 4, 6] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 725 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J [3, 4, 6] |
| R 7A1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 5] |
| R 7A1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [3] |
| R 7A2 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J [1, 2, 3, 5] |
| R 7A3 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [1, 2, 3, 5] |
| R 7A4 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J [1, 2, 5] |
| R 7A4 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [3] |
| R 7A5 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [3] |
| R 7A9 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-J [1, 2, 3, 5] |
| R 7C0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [1, 2, 3, 5] |
| R 7C1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J [1, 2, 3, 5] |
| R 7C2 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J [1, 2, 3, 5] |
| R 7C5 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J [1, 2, 3, 5] |
| R 7C6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [1, 2, 3, 5] |
| R 7C7 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J [1, 2, 3, 5] |
| R 7C8 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [1, 2, 3, 5] |
| R 7C9 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J [1, 2, 3, 5] |
| R 7D0 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [1, 2, 3, 5] |
| R 7D1 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [1, 2, 3, 5] |
| R 7D2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [1, 2, 3, 5] |
| R 7G2 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J [1, 2, 3, 5] |
| R 7G5 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J [1, 2, 3, 5] |
| R 7G6 | 103P400090 | CHIP RESISTOR | 1/10W 47Ω-J [1, 2, 3, 5] |
| R 901 | 109D036040 | COMPOSITION | 1/2W 8.2MΩ-K |
| R 903 | 109P052010 | FUSE | 1/4W 100Ω-J |
| R 911 | 103P370040 | FUSE | 1/4W 18Ω-J |
| R 917 | 103P398050 | FUSE | 1/2W 2.7Ω-J [1, 2] |
| R 920 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 921 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 922 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 923 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 9A4 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 9B0 | 103P475030 | CHIP RESISTOR | 1/10W 15kΩ-F |
| R 9C4 | 103P398020 | FUSE | 1/2W 1.5Ω-J |
| R 9C5 | 103P378080 | FUSE | 1/4W 4.7Ω-J [3, 4, 6] |
| RJ101 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [1, 2, 5] |
| RJ102 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ104 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ105 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ106 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ107 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [1, 2, 4, 6] |
| RJ202 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [1, 2, 5] |
| RJ203 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ204 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| RJ205 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ206 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ207 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ208 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ209 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ211 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ212 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ213 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [1, 2, 3, 5] |
| RJ214 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ215 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2601 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2602 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [3, 4, 6] |
| RJ2603 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2604 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2605 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2606 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2607 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2608 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2611 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2613 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [3, 4, 6] |
| RJ2614 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2616 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2617 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2618 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ2619 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [3, 4, 6] |
| RJ301 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ302 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ303 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ304 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ305 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ306 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ307 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ309 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ310 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ314 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ315 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ316 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ318 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ319 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ320 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ321 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ322 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ323 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A1 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A2 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A3 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A5 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A6 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A7 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A8 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3A9 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3001 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3002 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3003 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |

HS－550V (B) : [1]  HS－551V (B) : [2]  HS－551V (E) : [3]
HS－551V (G) : [4]  HS－551V (IR) : [5]  HS－551V (Y) : [6]

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| RJ3005 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3006 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) [3, 4, 6] |
| RJ3008 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3009 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3010 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ3017 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ401 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ402 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ403 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ404 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ405 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ406 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ407 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ408 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ501 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ502 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ503 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ504 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |
| RJ505 | 103P409050 | CHIP RESISTOR | 0.1W 0Ω (2125) |

## APACITORS AND TRIMMERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 101 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 102 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 103 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K [3, 5] |
| C 104 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 105 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 106 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C[1, 2, 4, 6] |
| C 107 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 108 | 141P135000 | CHIP CAPACITOR | F25V 0.22μF-Z |
| C 109 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 112 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 114 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 117 | 154P331050 | CHIP CAPACITOR | CH50V 15pF-J |
| C 118 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 119 | 154P321060 | CHIP CAPACITOR | SL50V 15pF-J [1, 2, 5] |
| C 119 | 154P321080 | CHIP CAPACITOR | SL50V 18pF-J [3, 4, 6] |
| C 122 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[3, 4, 6] |
| C 124 | 141P134010 | CHIP CAPACITOR | F50V 0.047M [3, 4, 6] |
| C 126 | 141P131020 | CHIP CAPACITOR | B50V 1800pF-K [3, 4, 6] |
| C 127 | 154P325080 | CHIP CAPACITOR | SL50V 820pF [3, 4, 6] |
| C 131 | 141P130060 | CHIP CAPACITOR | B50V 560pF-K |
| C 132 | 141P137080 | CHIP CAPACITOR | B25V 0.047M |
| C 151 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF- K [3, 5] |
| C 152 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K [3, 5] |
| C 153 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K [3, 5] |
| C 199 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 201 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 202 | 141P136030 | CHIP CAPACITOR | F16V 1μF-Z |
| C 203 | 141P136030 | CHIP CAPACITOR | F16V 1μF-Z |
| C 204 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 205 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 206 | 141P136030 | CHIP CAPACITOR | F16V 1μF-Z |
| C 207 | 141P136030 | CHIP CAPACITOR | F16V 1μF-Z |
| C 208 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |
| C 209 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 210 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 212 | 141P132000 | CHIP CAPACITOR | B50V 8200pFK |
| C 213 | 154P333010 | CHIP CAPACITOR | CH50V 68pF-J |
| C 214 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 215 | 154P323000 | CHIP CAPACITOR | SL50V 56pF-J |
| C 216 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |
| C 217 | 154P323040 | CHIP CAPACITOR | SL50V 82pF-J |
| C 218 | 154P324020 | CHIP CAPACITOR | SL50V 180pF-J |
| C 219 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 220 | 141P137080 | CHIP CAPACITOR | B25V 0.047M |
| C 221 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 222 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 224 | 154P323040 | CHIP CAPACITOR | SL50V 82pF-J |
| C 260 | 141P130050 | CHIP CAPACITOR | B50V 470pF-K |
| C 261 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2A3 | 154P325020 | CHIP CAPACITOR | SL50V 470pF |
| C 2A4 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J |
| C 2A5 | 154P325000 | CHIP CAPACITOR | SL50V 390pF-J |
| C 2A6 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2A7 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 2A8 | 154P321080 | CHIP CAPACITOR | SL50V 18pF-J [1, 2, 5] |
| C 2A8 | 154P322040 | CHIP CAPACITOR | SL50V 33pF-J [3, 4, 6] |
| C 2B0 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2B1 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2G0 | 154P325000 | CHIP CAPACITOR | SL50V 390pF-J |
| C 2G1 | 154P322000 | CHIP CAPACITOR | SL50V 22pF-J |
| C 2G2 | 141P137040 | CHIP CAPACITOR | B25V 0.022M |
| C 2G4 | 141P137040 | CHIP CAPACITOR | B25V 0.022M |
| C 2G6 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2H0 | 141P137040 | CHIP CAPACITOR | B25V 0.022M |
| C 2H4 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2H9 | 141P137080 | CHIP CAPACITOR | B25V 0.047M |
| C 2J0 | 154P321060 | CHIP CAPACITOR | SL50V 15pF-J |
| C 2J1 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 2J2 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J |
| C 2J3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2J4 | 154P322020 | CHIP CAPACITOR | SL50V 27pF-J |
| C 2K0 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2K1 | 141P132000 | CHIP CAPACITOR | B50V 8200pFK |
| C 2K4 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2K5 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [1, 2, 5] |
| C 2K5 | 154P324020 | CHIP CAPACITOR | SL50V 180pF-J [3, 4, 6] |
| C 2L0 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2L1 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2L3 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2L6 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2L7 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2L8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L9 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2M3 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2M4 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2T0 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J |
| C 2T1 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 2X0 | 141P130010 | CHIP CAPACITOR | B50V 220pF-K |
| C 2X1 | 141P130010 | CHIP CAPACITOR | B50V 220pF-K |

HS－550V (B) : [1]  HS－551V (B) : [2]  HS－551V (E) : [3]
HS－551V (G) : [4]  HS－551V (IR) : [5]  HS－551V (Y) : [6]

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 2Y0 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 2303 | 141P131090 | CHIP CAPACITOR | B50V 6800pF-K [3, 4, 6] |
| C 2306 | 141P131090 | CHIP CAPACITOR | B50V 6800pF-K [3, 4, 6] |
| C 2307 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K [1, 2, 5] |
| C 2307 | 141P130040 | CHIP CAPACITOR | B50V 390pF-K [3, 4, 6] |
| C 2308 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K [1, 2, 5] |
| C 2308 | 141P130050 | CHIP CAPACITOR | B50V 470pF-K [3, 4, 6] |
| C 2311 | 141P131090 | CHIP CAPACITOR | B50V 6800pF-K |
| C 2314 | 141P131090 | CHIP CAPACITOR | B50V 6800pF-K |
| C 2315 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J |
| C 2316 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J |
| C 2320 | 141P131020 | CHIP CAPACITOR | B50V 1800pF-K |
| C 2321 | 141P131020 | CHIP CAPACITOR | B50V 1800pF-K |
| C 2322 | 141P131020 | CHIP CAPACITOR | B50V 1800pF-K [3, 4, 6] |
| C 2323 | 141P131020 | CHIP CAPACITOR | B50V 1800pF-K [3, 4, 6] |
| C 2610 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K[3, 4, 6] |
| C 2615 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2617 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J [3, 4, 6] |
| C 2620 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J [3, 4, 6] |
| C 2642 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K [3, 4, 6] |
| C 2643 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K [3, 4, 6] |
| C 2644 | 141P133090 | CHIP CAPACITOR | F50V 0.022M |
| C 2645 | 141P133090 | CHIP CAPACITOR | F50V 0.022M |
| C 2650 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K |
| C 2651 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K |
| C 2652 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K |
| C 2653 | 141P130030 | CHIP CAPACITOR | B50V 330pF-K |
| C 301 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 302 | 141P135080 | CHIP CAPACITOR | F25V 0.1μF-Z |
| C 304 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 305 | 141P135080 | CHIP CAPACITOR | F25V 0.1μF-Z |
| C 307 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 308 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J |
| C 309 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 310 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 311 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 312 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 313 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 314 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 315 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 3A0 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 3A1 | 141P130080 | CHIP CAPACITOR | B50V 820pF-K |
| C 3A9 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 3B9 | 141P135010 | CHIP CAPACITOR | F25V 0.33μF-Z |
| C 3C0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 3C3 | 141P130060 | CHIP CAPACITOR | B50V 560pF-K |
| C 3010 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 3011 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 3012 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 3013 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 3014 | 141P130020 | CHIP CAPACITOR | B50V 270pF-K |
| C 3252 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3253 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3352 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3354 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 3400 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3401 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3415 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 4A2 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 4A3 | 154P324020 | CHIP CAPACITOR | SL50V 180pF-J |
| C 4A4 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 4B0 | 141P131080 | CHIP CAPACITOR | B50V 5600pF-K |
| C 4B1 | 141P131080 | CHIP CAPACITOR | B50V 5600pF-K |
| C 4B3 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 4B5 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 4B6 | 141P139000 | CHIP CAPACITOR | B25V 0.056μF-K |
| C 4B7 | 154P331030 | CHIP CAPACITOR | CH50V 12pF-J |
| C 4B8 | 141P139010 | CHIP CAPACITOR | B25V 0.068MK |
| C 4B9 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 4C0 | 141P131050 | CHIP CAPACITOR | B50V 3300pF-K |
| C 4C4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 4C5 | 141P133090 | CHIP CAPACITOR | F50V 0.022M |
| C 4C9 | 141P131060 | CHIP CAPACITOR | B50V 3900pF-K |
| C 4D0 | 141P131010 | CHIP CAPACITOR | B50V 1500pF- |
| C 4D3 | 141P137070 | CHIP CAPACITOR | B25V 0.039μF-K |
| C 4G7 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 4G8 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 4J0 | 154P331070 | CHIP CAPACITOR | CH50V 18pF-J |
| C 501 | 154P330040 | CHIP CAPACITOR | CJ50V 3pF-C |
| C 502 | 154P330040 | CHIP CAPACITOR | CJ50V 3pF-C |
| C 504 | 154P331090 | CHIP CAPACITOR | CH50V 22pF-J |
| C 505 | 154P331090 | CHIP CAPACITOR | CH50V 22pF-J |
| C 507 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J [3, 4, 6] |
| C 508 | 141P137080 | CHIP CAPACITOR | B25V 0.047M |
| C 509 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 510 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 511 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 512 | 141P132000 | CHIP CAPACITOR | B50V 8200pF-K |
| C 530 | 141P131010 | CHIP CAPACITOR | B50V 1500pF |
| C 551 | 154P324000 | CHIP CAPACITOR | SL50V 150pF-J [2, 3, 4, 5] |
| C 552 | 141P137060 | CHIP CAPACITOR | B50V 0.033μF-K [2, 3, 4, 5] |
| C 554 | 141P131030 | CHIP CAPACITOR | B50V 2200pF-K [2, 3, 4, 5] |
| C 555 | 141P137060 | CHIP CAPACITOR | B50V 0.033μF-K [2, 3, 4, 5] |
| C 556 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [2, 3, 4, 5] |
| C 5A1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 5A2 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 5A5 | 189P197020 | C-ELE-DOUBLE-LAYER | FM0H473Z |
| C 5A7 | 141P135080 | CHIP CAPACITOR | F25V 0.1μF-Z |
| C 5A9 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 5B5 | 141P134010 | CHIP CAPACITOR | F50V 0.047M |
| C 5B7 | 141P131030 | CHIP CAPACITOR | B50V 2200pF-K |
| C 5C0 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C |
| C 5C1 | 154P331070 | CHIP CAPACITOR | CH50V 18pF-J |
| C 5C2 | 154P331070 | CHIP CAPACITOR | CH50V 18pF-J |
| C 5C3 | 154P330090 | CHIP CAPACITOR | CH50V 8pF-C |
| C 5C4 | 141P130060 | CHIP CAPACITOR | B50V 560pF-K |

| YMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| 5C7 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| 5L5 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| 701 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 703 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 704 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 705 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 706 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 707 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 709 | 154P321020 | CHIP CAPACITOR | SL50V 10pF-C [3, 4, 6] |
| 713 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [3, 4, 6] |
| 720 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J [3, 4, 6] |
| 7A1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7A3 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [1, 2, 3, 5] |
| 7A4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [1, 2, 3, 5] |
| 7A5 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [1, 2, 3, 5] |
| 7C0 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J[1, 2, 3, 5] |
| 7C1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7C3 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7C5 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7C8 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J [1, 2, 3, 5] |
| 7C9 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J [1, 2, 3, 5] |
| 7D3 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7D4 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7D6 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J [1, 2, 3, 5] |
| 7D9 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7E0 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J [1, 2, 3, 5] |
| 7E2 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [1, 2, 3, 5] |
| 7E5 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7E6 | 154P321020 | CHIP CAPACITOR | SL50V 10pF-C [1, 2, 3, 5] |
| 7E8 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K[1, 2, 3, 5] |
| 7F0 | 141P130040 | CHIP CAPACITOR | B50V 390pF-K [1, 2, 3, 5] |
| 7F1 | 141P133090 | CHIP CAPACITOR | F50V 0.022M [1, 2, 3, 5] |
| 901 | 189P153040 | C-METAL-P-FILM | AC250V 0.1μF-M [1] |
| 902 | 189P153040 | C-METAL-P-FILM | AC250V 0.1μF-M [1] |
| 9A1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| 9A9 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| 9C2 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |

## VITCHES

| | | | |
|---|---|---|---|
| 101 | 431C106010 | SLIDE SWITCH | VTR/TV |
| 5A0 | 439P033010 | SWITCH | RIS MPU10101MMBO |
| 5A1 | 432P166010 | KEY BOARD SWITCH | RESET |
| 8A1 | 432P089040 | KEY BOARD SWITCH | PLAY |
| 8A2 | 432P089040 | KEY BOARD SWITCH | POWER [1] |
| 8A2 | 432P089020 | KEY BOARD SWITCH | POWER [2, 3, 4, 5, 6] |
| 8A3 | 432P089020 | KEY BOARD SWITCH | FF [1] |
| 8A3 | 432P089040 | KEY BOARD SWITCH | FF [2, 3, 4, 5, 6] |
| 8B1 | 432P089040 | KEY BOARD SWITCH | STOP |
| 8B2 | 432P089040 | KEY BOARD SWITCH | EJECT [1] |
| 8B2 | 432P089020 | KEY BOARD SWITCH | EJECT [2, 3, 4, 5, 6] |
| 8B3 | 432P089020 | KEY BOARD SWITCH | REW [1] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| S 8B3 | 432P089040 | KEY BOARD SWITCH | REW [2, 3, 4, 5, 6] |
| S 8C1 | 432P089020 | KEY BOARD SWITCH | REC/OTR [1] |
| S 8C1 | 432P089040 | KEY BOARD SWITCH | REC/OTR [2, 3, 4, 5, 6] |
| S 8C2 | 432P089040 | KEY BOARD SWITCH | ONE KEY PROGRAM |
| S 8C3 | 432P089040 | KEY BOARD SWITCH | CH-DOWN |
| S 8D1 | 432P089020 | KEY BOARD SWITCH | PAUSE [1] |
| S 8D1 | 432P089040 | KEY BOARD SWITCH | PAUSE [2, 3, 4, 5, 6] |
| S 8D2 | 432P089040 | KEY BOARD SWITCH | RENT PB [1] |
| S 8D2 | 432P089020 | KEY BOARD SWITCH | RENT PB [2, 3, 4, 5, 6] |
| S 8D3 | 432P089040 | KEY BOARD SWITCH | CH-UP |
| S 8D4 | 432P089040 | KEY BOARD SWITCH | AUTO SET UP/JUST CLOCK [2, 3, 4, 5] |

## MISCELLANEOUS

| | | | |
|---|---|---|---|
| ○CU 01 | 295P276070 | RF CONVERTER | [1, 2] |
| ○CU 01 | 295P276050 | RF CONVERTER | [3, 4, 6] |
| ○CU 01 | 295P276060 | RF CONVERTER | [5] |
| F 901 | 283D046080 | FUSE | T630MA |
| F 902 | 283D047050 | FUSE | T2.5A |
| F 903 | 283D047050 | FUSE | T2.5A |
| J 2A0 | 451C096040 | PIN JACK | RED |
| J 2A1 | 451C096010 | PIN JACK | WHITE |
| J 2001 | 451C058020 | CONNECTOR | 21P |
| J 2002 | 451C058020 | CONNECTOR | 21P |
| J 5A1 | 451C129020 | JACK MICROPHONE | [2] |
| M 470 | 288P126010 | MOTOR CAPSTAN | F20KB79 |
| M 570 | 288P088060 | MOTOR DRUM | DC12V 3.3W |
| M 571 | 288P145010 | MOTOR LOADING | DC12V 3W |
| ○MB HB | 243C158020 | LEAD CARD | 15P L100(MB-HB) |
| ○MC HC | 243C163020 | LEAD CARD | 25P L100(MC-HC) |
| ○MK TK | 243C161070 | LEAD CARD | 21P L200(MK-TK) |
| P 5A0 | 286P010010 | BUZZER | PKM22EPT-2001 |
| S 570 | 439D039010 | MODE SELECT SWICH | (J) |
| T 370 | 460P060060 | A/C HEAD | |
| T 371 | 460P153010 | FULL ERASE HEAD | FE HEAD |
| TU 01 | 295P418010 | TUNER | TEKE4-071A [3, 4, 6] |
| TU 01 | 295P194020 | TUNER TV | TERB1-044A [1, 2] |
| TU 01 | 295P297020 | TUNER TV | TERE1-0N3A [5] |
| ○V 8A0 | 253P115050 | TUBE FLUOR | BJ360GK |
| X 2A0 | 285P083010 | CRYSTAL RESONATOR | 4.43362MHz |
| X 4A0 | 285P248010 | CRYSTAL RESONATOR | 4.43MHz |
| X 501 | 285P084010 | CRYSTAL RESONATOR | 17.7345MHz |
| X 571 | 285P029040 | CRYSTAL RESONATOR | 4.00000MHz [2] |
| X 5A0 | 285P054030 | CRYSTAL RESONATOR | 32.8kHz |
| X 5A1 | 285P235010 | CRYSTAL RESONATOR | 8.3886MHz |
| X 701 | 285P204020 | CRYSTAL RESONATOR | 10MHz [3, 4, 6] |
| ○X 7A0 | 285P253010 | CRYSTAL RESONATOR | 8.192MHz [1, 2, 3, 5] |
| Z 8A0 | 939P580010 | PREAMP UNIT | TFMT 5330 |

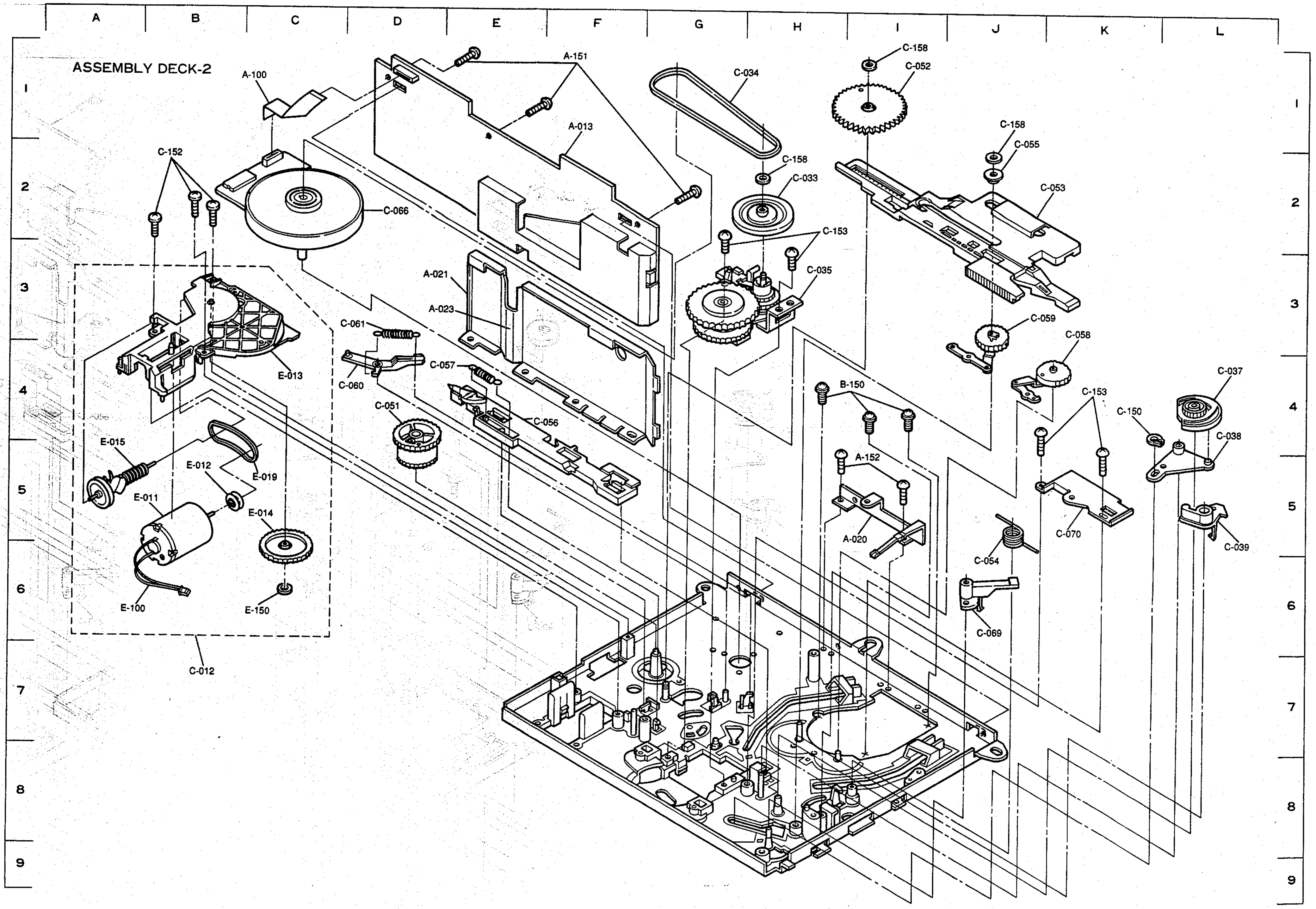
## PRINTED CIRCUIT BOARD ASSY'S

| | | | |
|---|---|---|---|
| ○ | 928D291001 | CONNECTOR PCB ASSY | [1, 2, 5] |
| ○ | 928D291002 | CONNECTOR PCB ASSY | [3, 4, 6] |
| ○ | 928D289001 | HA/AUDIO PCB ASSY | |
| ○ | 928D293006 | HIFI/NIC/DEC PCB ASSY | [1] |
| ○ | 928D293001 | HIFI/NIC/DEC PCB ASSY | [2] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| ○ | 928D293003 | HIFI/NIC/DEC PCB ASSY | [3] |
| ○ | 928D293002 | HIFI/NIC/DEC PCB ASSY | [4] |
| ○ | 928D293005 | HIFI/NIC/DEC PCB ASSY | [5] |
| ○ | 928D293004 | HIFI/NIC/DEC PCB ASSY | [6] |
| ○ | 927B895006 | MAIN PCB ASSY | [1] |
| ○ | 927B895001 | MAIN PCB ASSY | [2] |
| ○ | 927B895003 | MAIN PCB ASSY | [3] |
| ○ | 927B895002 | MAIN PCB ASSY | [4] |
| ○ | 927B895005 | MAIN PCB ASSY | [5] |
| ○ | 927B895004 | MAIN PCB ASSY | [6] |
| ○ | 928D290001 | POWER SUB2 PCB ASSY | [1, 2] |
| ○ | 928D290002 | POWER SUB2 PCB ASSY | [3, 4, 6] |
| ○ | 928D290003 | POWER SUB2 PCB ASSY | [5] |
| ○ | 928D320001 | TIMER PCB ASSY | [2] |
| ○ | 927B791010 | TIMER PCB ASSY | [1] |
| ○ | 928D319001 | TIMER PCB ASSY | [2] |
| ○ | 928D319003 | TIMER PCB ASSY | [3] |
| ○ | 928D319002 | TIMER PCB ASSY | [4] |
| ○ | 928D319005 | TIMER PCB ASSY | [5] |
| ○ | 928D319004 | TIMER PCB ASSY | [6] |
| ○ | 928D292001 | SAT PCB ASSY | [2] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|

# ASSEMBLY DECK-2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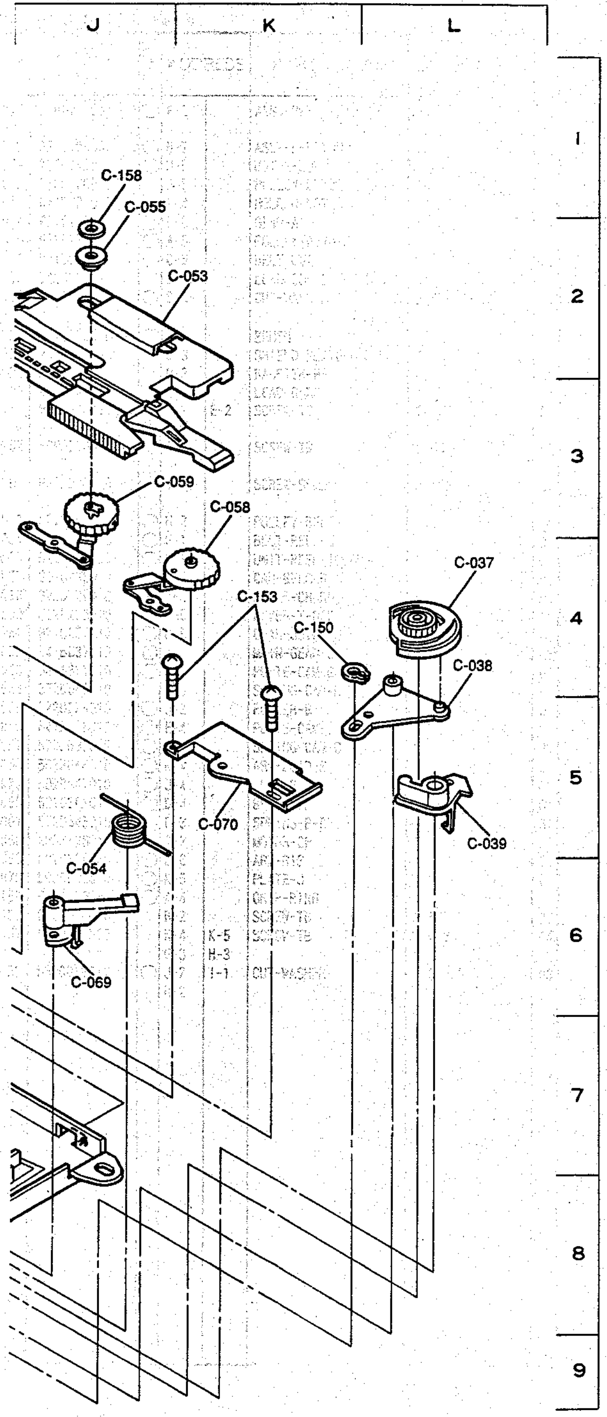
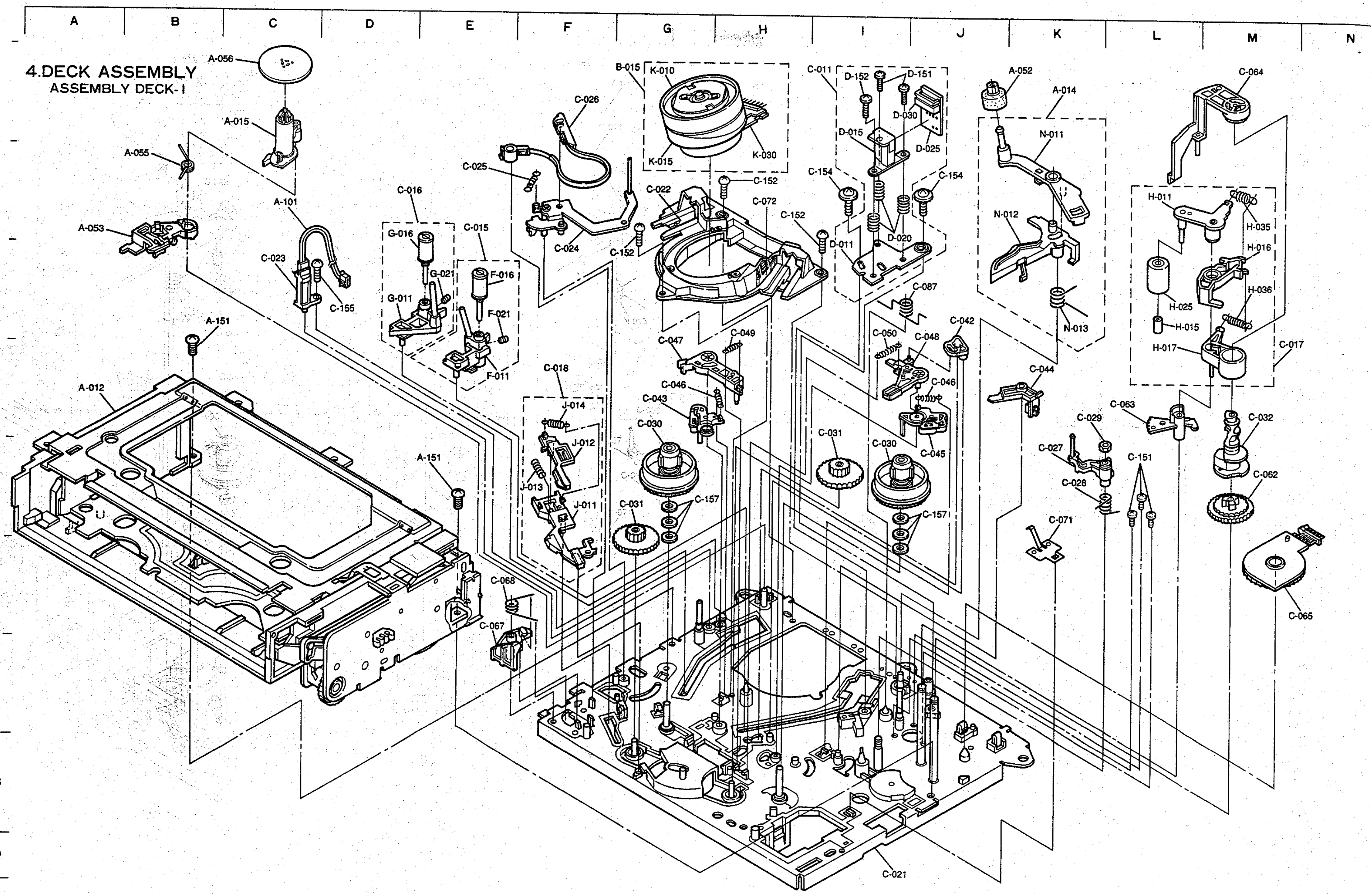


∗ Settelled Service Parts

| ITEM | PARTS No. | ∗ | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| A-013 | 928D289001 | ○ | F-2 | | ASSY-PWB-HA/AUDIO | | 01 |
| C-012 | 928D105002 | ○ | B-7 | | ASSY-L-MOTOR | | 01 |
| E-011 | 288D145010 | ○ | B-5 | | MOTOR-LOADING | | 01 |
| E-012 | 622D220020 | | B-5 | | PULLEY-MOTOR | | 01 |
| E-013 | 641B727010 | | C-4 | | HOLDER-MOTOR-J | | 01 |
| E-014 | 621C258010 | ○ | C-6 | | GEAR-A | | 01 |
| E-015 | 621C259010 | ○ | A-5 | | PULLEY-WORM-J | | 01 |
| E-019 | 521D088010 | ○ | C-5 | | BELT-LM2 | | 01 |
| E-100 | 248B173020 | | B-6 | | LEAD-CONNECTOR-S | | 01 |
| E-150 | 552C018020 | ○ | C-6 | | CUT-WASHER | 2. 5X4. 7X0. 5 | 01 |
| A-020 | 299C030010 | ○ | I-5 | | BRUSH | | 01 |
| A-021 | 292B204010 | | D-3 | | SHIELD-PLATE-HAK | | 01 |
| A-023 | 223D533010 | | D-3 | | BARRIER-HA | | 01 |
| A-100 | 243C125010 | ○ | C-1 | | LEAD-CARD | | 01 |
| A-151 | 669D224020 | | E-1<br>G-2 | E-2 | SCREW-TB | 2. 6X8 | 03 |
| A-152 | 669D224010 | | I-5 | | SCREW-TB | 2. 6X6 | 02 |
| B-150 | 669D200020 | | I-4 | | SCREW-SEMS | M2. 6X0. 45-6 | 03 |
| C-033 | 621C254010 | ○ | H-2 | | PULLEY-BELT | | 01 |
| C-034 | 521D081010 | ○ | G-1 | | BELT-REEL-J | | 01 |
| C-035 | 522B057030 | ○ | H-3 | | UNIT-REEL-IDLER | | 01 |
| C-037 | 621C235010 | ○ | L-4 | | CAM-GEAR-R | | 01 |
| C-038 | 622D229010 | ○ | L-5 | | LEVER-CHARGE | | 01 |
| C-039 | 622D223010 | ○ | L-5 | | LEVER-T-OFF | | 01 |
| C-051 | 621C257010 | ○ | D-5 | | GEAR-JOINT-J | | 01 |
| C-052 | 641B637010 | ○ | I-1 | | MAIN-GEAR-J | | 01 |
| C-053 | 641A311010 | ○ | J-2 | | PLATE-CAM-B | | 01 |
| C-054 | 572D640010 | | J-5 | | SPRING-CAM-B | | 01 |
| C-055 | 622D224010 | ○ | J-2 | | ROLLER-B | | 01 |
| C-056 | 641B636010 | ○ | E-4 | | PLATE-CAM-C | | 01 |
| C-057 | 572D636010 | ○ | E-4 | | SPRING-CAM-C | | 01 |
| C-058 | 592B048010 | ○ | K-4 | | ARM-LOAD-S | | 01 |
| C-059 | 592B047010 | ○ | J-4 | | ARM-LOAD-T | | 01 |
| C-060 | 621C261010 | ○ | D-4 | | BRAKE-CP | | 01 |
| C-061 | 572D645010 | ○ | D-3 | | SPRING-B-CP | | 01 |
| C-066 | 288P126010 | ○ | C-2 | | MOTOR-CP | M470 | 01 |
| C-069 | 621C308010 | ○ | J-6 | | ARM-RIS | | 01 |
| C-070 | 593C532010 | ○ | K-5 | | PLATE-J | | 01 |
| C-150 | 685C009010 | ○ | K-4 | | GRIP-RING | | 01 |
| C-152 | 669D224020 | | B-2 | | SCREW-TB | 2. 6X8 | 03 |
| C-153 | 669D224010 | | K-4<br>G-3 | K-5<br>H-3 | SCREW-TB | 2. 6X6 | 04 |
| C-158 | 552C018010 | ○ | J-2<br>H-2 | I-1 | CUT-WASHER | 2. 5X6. 0X0. 5 | 03 |

# 4.DECK ASSEMBLY

## ASSEMBLY DECK-I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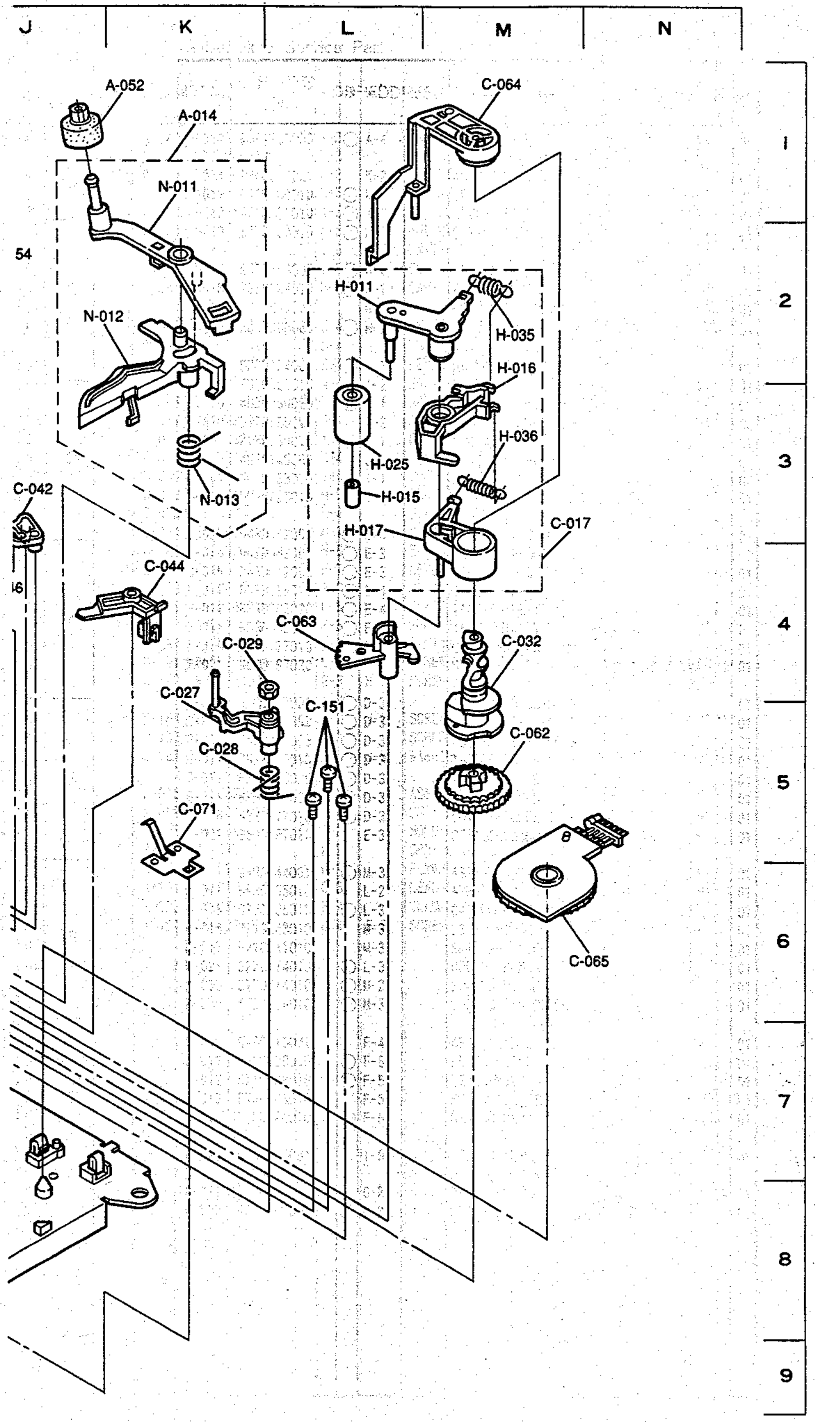


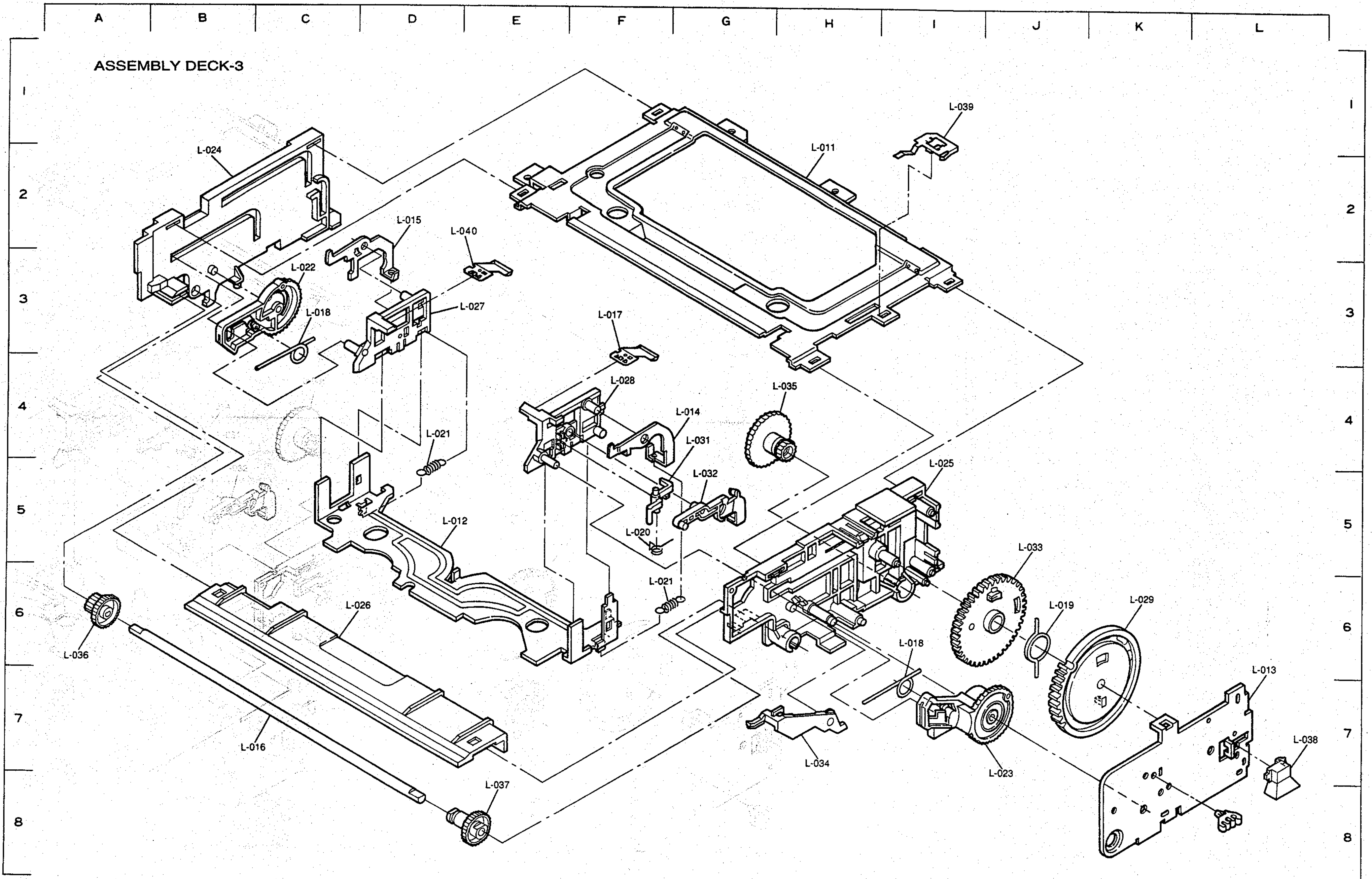
* Settelled Service Parts

| ITEM | PARTS No. | * | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| A-012 | 948A155006 | ○ | A-4 | | ASSY-F/L-J | | 01 |
| A-014 | 948B349001 | | K-2 | | ASSY-CLE | | 01 |
| N-011 | 641B680010 | ○ | K-2 | | ARM-CLE | | 01 |
| N-012 | 641B681010 | ○ | K-3 | | LEVER-CLE | | 01 |
| N-013 | 572D703010 | ○ | K-3 | | SPRING-CLE | | 01 |
| B-015 | 948B358002 | ○ | G-2 | | ASSY-DRUM | | 01 |
| K-010 | 928B984013 | ○ | G-1 | | ASSY-UPPR-DRUM | | 01 |
| K-015 | 927B681007 | | G-2 | | ASSY-LOWER-DRUM | | 01 |
| K-030 | 288P088060 | ○ | H-2 | | MOTOR-DRUM | M570 | 01 |
| C-011 | 928D104002 | ○ | I-1 | | ASSY-A/C-HEAD | | 01 |
| D-011 | 593C399010 | | I-2 | | PLATE-A/C | | 01 |
| D-015 | 460P060060 | ○ | I-1 | | HEAD | T370 | 01 |
| D-020 | 572D639010 | | I-2 | | SPRING-A/C | | 03 |
| D-025 | 215C730010 | | J-1 | | PWB-A/C-JA | | 01 |
| D-030 | 452C140060 | | J-1 | | CONNECTOR-PC2M(S) | | 01 |
| D-151 | 669D483010 | | I-1 | | SCREW | M2. 6X8 | 02 |
| D-152 | 669D485010 | | I-1 | | SCREW | 2. 6X8 | 01 |
| C-015 | 948D042001 | ○ | E-3 | | ASSY-TAPE-GUIDE-T | | 01 |
| C-015 | 948D042002 | ○ | E-3 | | ASSY-TAPE-GUIDE-T | | 01 |
| C-015 | 948D042003 | ○ | E-3 | | ASSY-TAPE-GUIDE-T | | 01 |
| F-011 | 635B085010 | ○ | E-4 | | TAPE-GUIDE-T | | 01 |
| F-011 | 635B085020 | ○ | E-4 | | TAPE-GUIDE-T | | 01 |
| F-011 | 635B085030 | ○ | E-4 | | TAPE-GUIDE-T | | 01 |
| F-016 | 522D177010 | ○ | E-3 | | GUIDE-ROLLER | | 01 |
| F-021 | 669D197020 | | E-4 | | SET-SCREW-F | D=M3X0. 5 L=4 | 01 |
| C-016 | 948D043001 | ○ | D-3 | | ASSY-TAPE-GUIDE-S | | 01 |
| C-016 | 948D043002 | ○ | D-3 | | ASSY-TAPE-GUIDE-S | | 01 |
| C-016 | 948D043003 | ○ | D-3 | | ASSY-TAPE-GUIDE-S | | 01 |
| G-011 | 635B086010 | ○ | D-3 | | TAPE-GUIDE-S | | 01 |
| G-011 | 635B086020 | ○ | D-3 | | TAPE-GUIDE-S | | 01 |
| G-011 | 635B086030 | ○ | D-3 | | TAPE-GUIDE-S | | 01 |
| G-016 | 522D177010 | ○ | D-3 | | GUIDE-ROLLER | | 01 |
| G-021 | 669D197020 | | E-3 | | SET-SCREW-F | D=M3X0. 5 L=4 | 01 |
| C-017 | 948D044001 | ○ | M-3 | | ASSY-ARM-PINCH | | 01 |
| H-011 | 593C465010 | | L-2 | | ARM-PINCH | | 01 |
| H-015 | 622D235010 | ○ | L-3 | | CAP-ROLLER | | 01 |
| H-016 | 621C243010 | | M-3 | | LEVER-PINCH | | 01 |
| H-017 | 621C241010 | | M-3 | | SLIDER-PINCH | | 01 |
| H-025 | 522D174010 | ○ | L-3 | | ROLLER-PINCH | | 01 |
| H-035 | 572D314010 | ○ | M-2 | | SPRING-PINCH | | 01 |
| H-036 | 572D714010 | ○ | M-3 | | SPRING-CAM-PINCH | | 01 |
| C-018 | 948C315001 | | F-4 | | ASSY-CHARGE | | 01 |
| J-011 | 641B629010 | ○ | F-6 | | LEVER-SWING-ID | | 01 |
| J-012 | 621C238010 | ○ | F-5 | | LEVER-REV | | 01 |
| J-013 | 572D684010 | | F-5 | | SPRING-CHARGE | | 01 |
| J-014 | 572D624010 | ○ | F-5 | | SPRING-REV | | 01 |
| C-021 | 948A159001 | | I-9 | | ASSY-MAIN-PLATE | | 01 |
| C-022 | 635A038030 | | G-2 | | DRUM-BASE | | 01 |
| C-023 | 460P153010 | ○ | C-3 | | HEAD-FE | T371 | 01 |

* Settelled Service Parts

| ITEM | PARTS No. | * | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| C-024 | 592B049010 | ○ | F-3 | | ARM-TENSION | | 01 |
| C-025 | 572D627010 | ○ | F-2 | | SPRING-TENS | | 01 |
| C-026 | 641B624020 | ○ | F-2 | | BELT-TENS-BRAKE | | 01 |
| C-027 | 635B084010 | ○ | K-5 | | ARM-TU-G | | 01 |
| C-028 | 572D647010 | ○ | K-5 | | SPRING-TU-G | | 01 |
| C-029 | 674D081020 | ○ | K-5 | | NUT-NYLON | M3X0. 5 | 01 |
| C-030 | 522C092010 | ○ | I-5 | G-5 | UNIT-REEL-DISK | | 02 |
| C-031 | 621C234010 | ○ | I-5 | G-6 | GEAR-R | | 02 |
| C-032 | 641B630010 | ○ | M-4 | | CAM-PINCH-J | | 01 |
| C-042 | 621C315010 | ○ | J-4 | | LEVER-SUB-OFF | | 01 |
| C-043 | 641B635020 | ○ | G-4 | | BRAKE-MAIN-S | | 01 |
| C-044 | 622D219010 | ○ | K-4 | | LEVER-RELEASE-M/B | | 01 |
| C-045 | 641B634020 | ○ | J-4 | | BRAKE-MAIN-T | | 01 |
| C-046 | 572D635010 | ○ | H-4 | J-4 | SPRING-M/B-J | | 02 |
| C-047 | 641B633010 | ○ | G-4 | | BRAKE-SUB-S | | 01 |
| C-048 | 641B632020 | ○ | I-4 | | BRAKE-SUB-T | | 01 |
| C-049 | 572D623010 | ○ | H-4 | | SPRING-SUB-S | | 01 |
| C-050 | 572D625010 | | I-4 | | SPRING-SUB-T | | 01 |
| C-062 | 621C240010 | ○ | M-5 | | GEAR-PINCH | | 01 |
| C-063 | 635C098010 | ○ | L-4 | | GEAR-TU-G | | 01 |
| C-064 | 641B628010 | ○ | M-1 | | CAP-CAM-PINCH | | 01 |
| C-065 | 439P039010 | ○ | N-6 | | SW-MODE-J | S570 | 01 |
| C-067 | 641B641010 | ○ | E-7 | | LEVER-RIS | | 01 |
| C-068 | 572D646010 | ○ | E-6 | | SPRING-RIS | | 01 |
| C-071 | 597D102010 | | K-5 | | PLATE-EB | | 01 |
| C-072 | 572D712010 | ○ | H-3 | | SPRING-DB | | 01 |
| C-087 | 572D697010 | | I-3 | | SPRING-AC-EARTH | | 01 |
| C-151 | 669D285040 | | L-5 | | SCREW-TB-PAN | M2. 6X8 | 03 |
| C-152 | 669D224020 | | G-3<br>I-3 | H-2 | SCREW-TB | 2. 6X8 | 03 |
| C-154 | 669D476020 | ○ | I-2 | J-2 | SCREW-TB-SEMS | 2. 6X8 | 02 |
| C-155 | 669D224030 | | D-3 | | SCREW-TB | 2. 6X10 | 01 |
| C-157 | 552C017030 | ○ | G-5 | J-5 | WASHER-THRUST | 2. 5X6X0. 13 | 06 |
| A-015 | 948C322001 | | C-1 | | ASSY-IMP-S | | 01 |
| A-052 | 621C033010 | ○ | J-1 | | UNIT-CLE-ROLLER | | 01 |
| A-053 | 641B699010 | ○ | A-2 | | HOLDER-TG | | 01 |
| A-055 | 572D721010 | | B-2 | | SPRING-IMP-J | | 01 |
| A-056 | 597D168010 | | B-1 | | FLYWHEEL-J | | 01 |
| A-101 | 248B173040 | | C-3 | | LEAD-CONNECTOR-S | | 01 |
| A-120 | 641C685010 | | E-7 | | CLAMPER-LEAD-F/L | | 01 |
| A-151 | 669D224020 | | B-4 | E-5 | SCREW-TB | 2. 6X8 | 02 |

## ASSEMBLY DECK-3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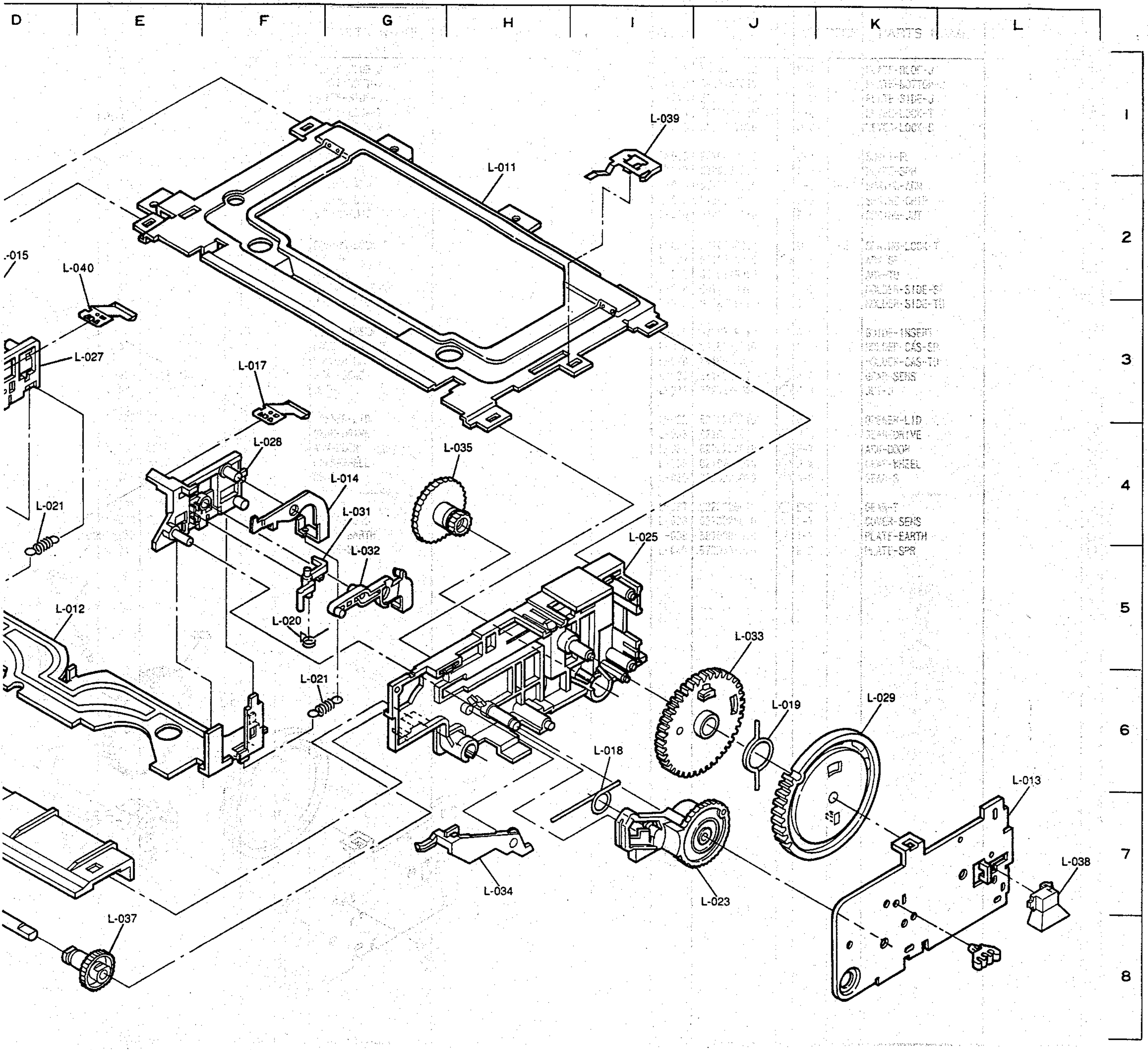
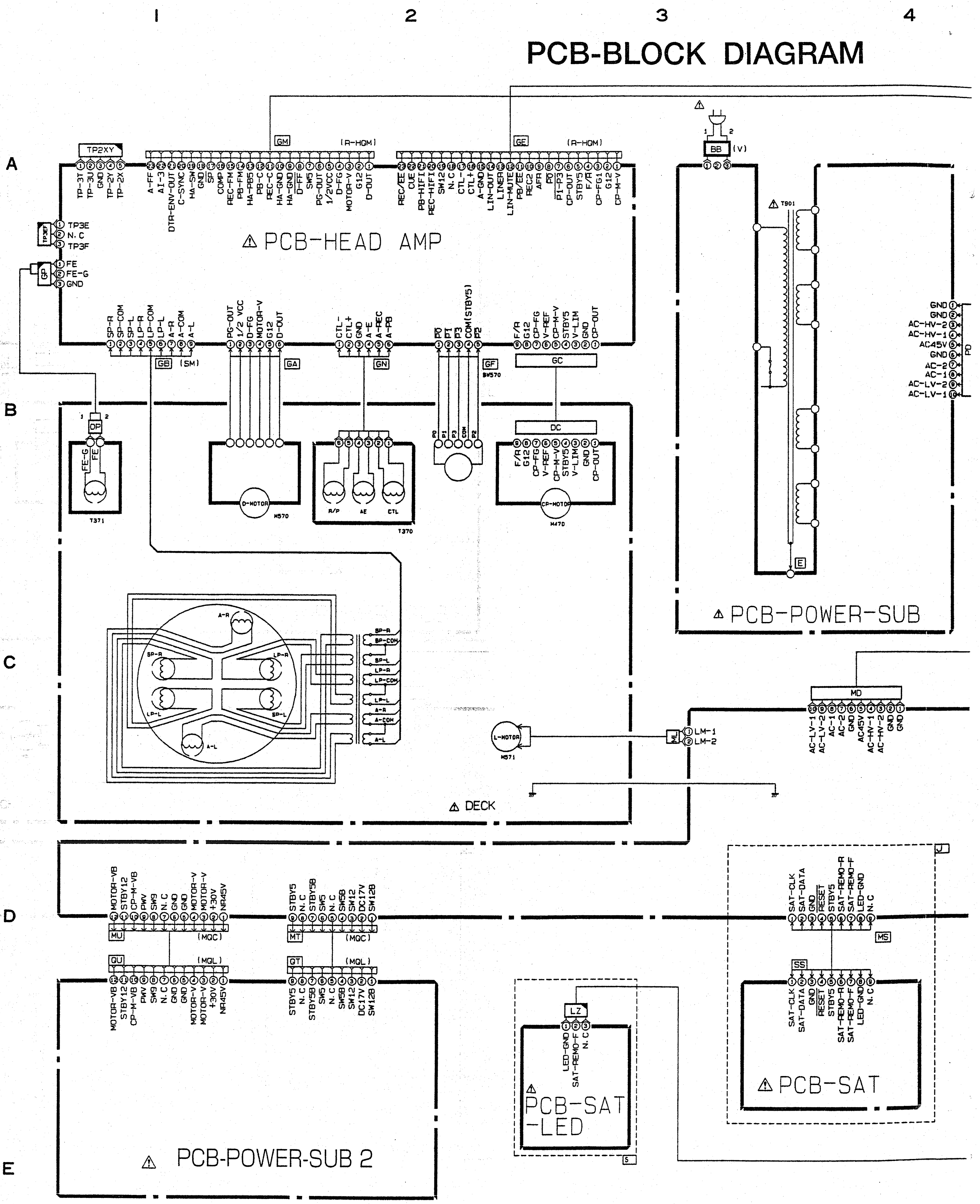
| L-03 |
| L-03 |
| L-04 |


D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
7
8
L-039
L-011
-015
L-040
L-027
L-017
L-028
L-035
L-014
L-021
L-031
L-032
L-025
L-012
L-020
L-033
L-021
L-019
L-029
L-018
L-013
L-038
L-034
L-023
L-037

* Settelled Service Parts

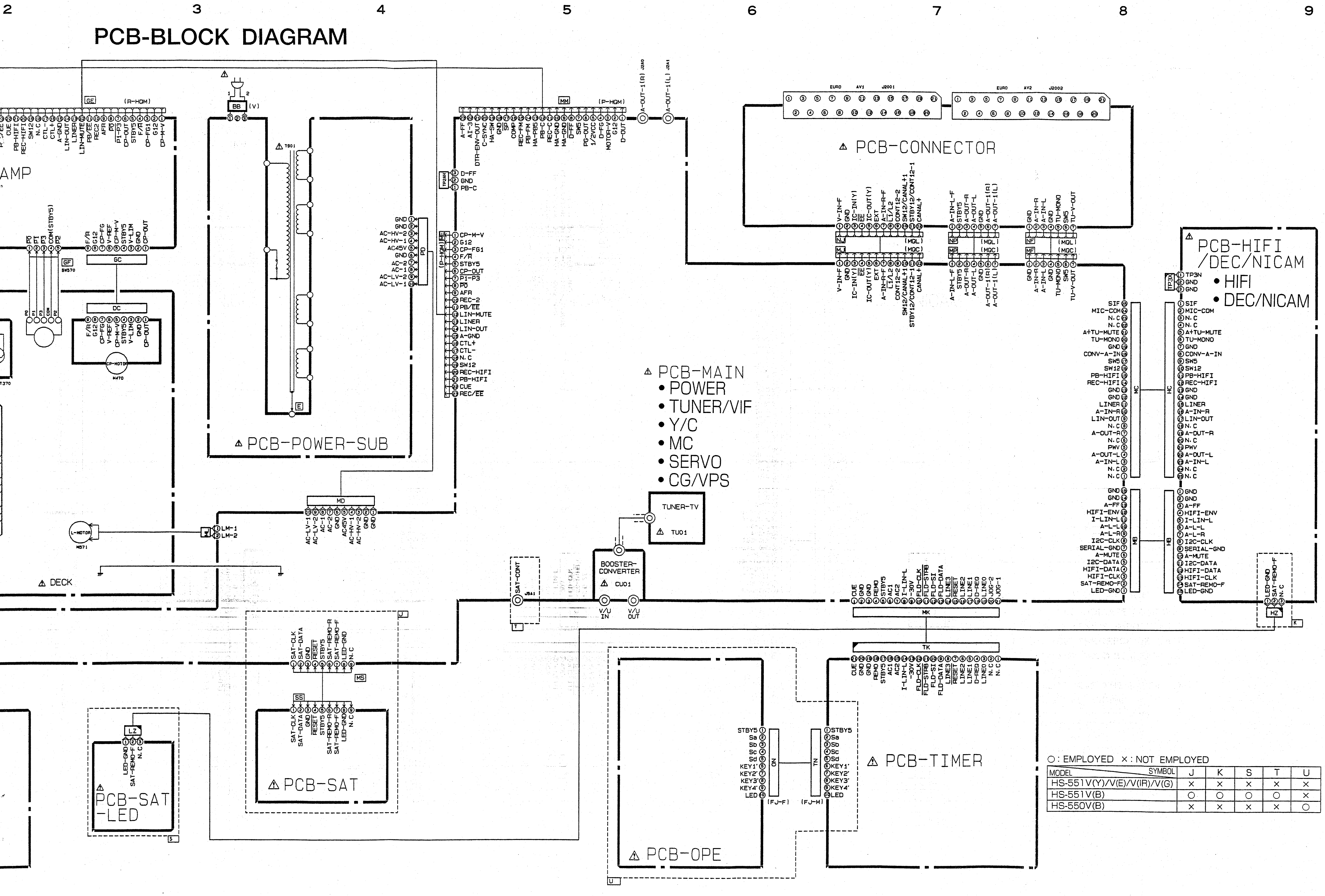
| ITEM | PARTS No. | * | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| L-011 | 592B156010 | | H-1 | | PLATE-ROOF-J | | 01 |
| L-012 | 592B150010 | | D-5 | | PLATE-BOTTOM-J | | 01 |
| L-013 | 592B157010 | | L-6 | | PLATE-SIDE-J | | 01 |
| L-014 | 596D986010 | | G-4 | | LEVER-LOCK-T | | 01 |
| L-015 | 596D987010 | | D-2 | | LEVER-LOCK-S | | 01 |
| L-016 | 631D443010 | | C-7 | | SHAFT-FL | | 01 |
| L-017 | 572D634010 | | F-3 | | PLATE-SPR | | 01 |
| L-018 | 572D631010 | ○ | C-3 | I-6 | SPRING-ARM | | 02 |
| L-019 | 572D632010 | | J-6 | | SPRING-CHIP | | 01 |
| L-020 | 572D633010 | | F-5 | | SPRING-JUT | | 01 |
| L-021 | 572D630020 | | D-4 | F-6 | SPRING-LOCK-T | | 02 |
| L-022 | 621C250010 | ○ | C-3 | | ARM-SP | | 01 |
| L-023 | 641B719010 | | J-7 | | ARM-TU | | 01 |
| L-024 | 641A360010 | | B-2 | | HOLDER-SIDE-SP | | 01 |
| L-025 | 641A718010 | | I-4 | | HOLDER-SIDE-TU | | 01 |
| L-026 | 621C249010 | | D-6 | | GUIDE-INSERT | | 01 |
| L-027 | 641B626010 | | E-3 | | HOLDER-CAS-SP | | 01 |
| L-028 | 641B638010 | | F-4 | | HOLDER-CAS-TU | | 01 |
| L-029 | 641B625010 | ○ | K-6 | | GEAR-SENS | | 01 |
| L-031 | 622D231010 | ○ | G-4 | | JUT-J | | 01 |
| L-032 | 621C245010 | | G-5 | | OPENER-LID | | 01 |
| L-033 | 622D227010 | ○ | J-5 | | GEAR-DRIVE | | 01 |
| L-034 | 622D230010 | ○ | H-7 | | ARM-DOOR | | 01 |
| L-035 | 621C252010 | ○ | H-4 | | GEAR-WHEEL | | 01 |
| L-036 | 622D225010 | ○ | A-6 | | GEAR-S | | 01 |
| L-037 | 622D226010 | ○ | E-8 | | GEAR-T | | 01 |
| L-038 | 622D228010 | | L-7 | | COVER-SENS | | 01 |
| L-039 | 597D085010 | | I-1 | | PLATE-EARTH | | 01 |
| L-040 | 572D634020 | | E-2 | | PLATE-SPR | | 01 |

# PCB-BLOCK DIAGRAM



1
2
3
4
A
B
C
D
E
TP2XY
TP-3T
TP-3U
GND
TP-2Y
TP-2X
TP3EF
TP3E
N.C
TP3F
GP
FE
FE-G
GND
GM
(R-HQM)
A-FF
AI-3
DTR-ENV-OUT
C-SYNC
HA-SW
GND
SP
COMP
REC-FM
PB-FM
HA-PB5
PB-C
REC-C
HA-GND
HA-GND
D-FF
SW5
PG-OUT
1/2VCC
D-FG
MOTOR-V
G12
D-OUT
GE
(R-HQM)
REC/EE
CUE
PB-HIFI
REC-HIFI
SW12
N.C
CTL-
CTL+
A-GND
LIN-OUT
LINER
LIN-MUTE
PB/EE
REC2
AFR
P0
P1-P3
CP-OUT
STBY5
F/R
CP-FG1
G12
CP-M-V
PCB-HEAD AMP
SP-R
SP-COM
SP-L
LP-R
LP-COM
LP-L
A-R
A-COM
A-L
GB
(SM)
PG-OUT
1/2 VCC
D-FG
MOTOR-V
G12
D-OUT
GA
CTL-
CTL+
GND
A-E
A-REC
A-PB
GN
P0
P1
P3
COM(STBY5)
P2
GF
SW570
F/R
G12
CP-FG
V-REF
CP-M-V
STBY5
V-LIM
GND
CP-OUT
GC
DC
OP
FE-G
FE
T371
D-MOTOR
M570
R/P
AE
CTL
T370
P0
P1
P3
COM
P2
CP-MOTOR
M470
A-R
SP-R
LP-R
SP-L
LP-L
A-L
SP-R
SP-COM
SP-L
LP-R
LP-COM
LP-L
A-R
A-COM
A-L
L-MOTOR
M571
ML
LM-1
LM-2
DECK
BB
(V)
T901
E
GND
GND
AC-HV-2
AC-HV-1
AC45V
GND
AC-2
AC-1
AC-LV-2
AC-LV-1
PD
PCB-POWER-SUB
MD
AC-LV-1
AC-LV-2
AC-1
AC-2
GND
AC45V
AC-HV-1
AC-HV-2
GND
GND
MOTOR-VB
STBY12
CP-M-VB
PWV
SW9
N.C
GND
GND
MOTOR-V
MOTOR-V
+30V
NR45V
MU
(MQC)
QU
(MQL)
STBY5
N.C
STBY5B
SW5
N.C
SW5B
SW12
DC17V
SW12B
MT
(MQC)
QT
(MQL)
PCB-POWER-SUB 2
LZ
LED-GND
SAT-REMO-F
N.C
PCB-SAT-LED
S
J
SAT-CLK
SAT-DATA
GND
RESET
STBY5
SAT-REMO-R
SAT-REMO-F
LED-GND
N.C
MS
SS
PCB-SAT

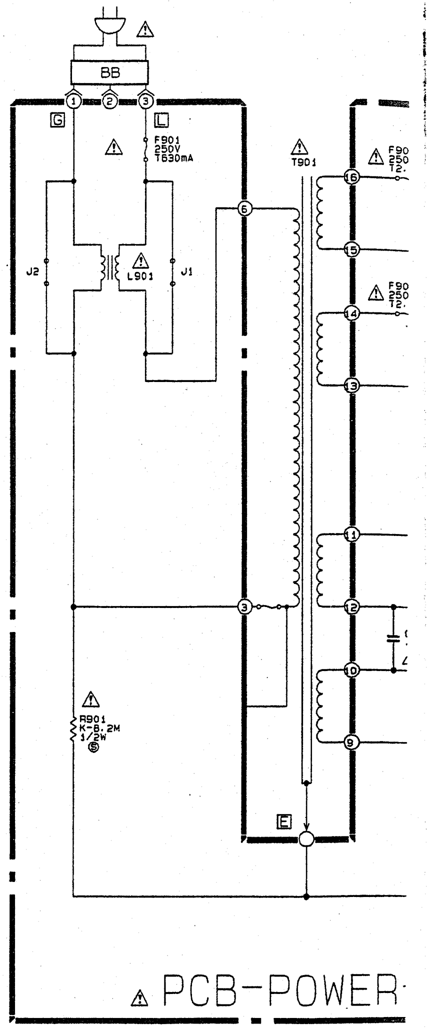
# PCB-BLOCK DIAGRAM


2
3
4
5
6
7
8
9
AMP
GF
(R-HQM)
GC
DC
SW570
CP-MOTOR
M470
T370
L-MOTOR
M571
LM-1
LM-2
DECK
BB
(V)
T901
E
PCB-POWER-SUB
PO
(P-HQM)
MD
MM
TP2H
D-FF
GND
PB-C
A-OUT-1(R) J2A0
A-OUT-1(L) J2A1
PCB-CONNECTOR
EURO AV1 J2001
EURO AV2 J2002
NL
ML
(MQL)
(MQC)
NB
MB
NF
MF
PCB-HIFI
/DEC/NICAM
• HIFI
• DEC/NICAM
TP3N
TP3H
MC
HC
MB
HB
PCB-MAIN
• POWER
• TUNER/VIF
• Y/C
• MC
• SERVO
• CG/VPS
TUNER-TV
TU01
BOOSTER-CONVERTER
CU01
V/U IN
V/U OUT
SAT-CONT
J5A1
T
J
MS
SS
PCB-SAT
LZ
PCB-SAT
-LED
S
MK
TK
PCB-TIMER
ON
TN
(FJ-F)
(FJ-M)
PCB-OPE
U
HZ
K
LED-GND
SAT-REMO-F
N.C

○ : EMPLOYED × : NOT EMPLOYED

| MODEL \ SYMBOL | J | K | S | T | U |
|---|---|---|---|---|---|
| HS-551V(Y)/V(E)/V(IR)/V(G) | × | × | × | × | × |
| HS-551V(B) | ○ | ○ | ○ | ○ | × |
| HS-550V(B) | × | × | × | × | ○ |

10


BB
G
L
F901 250V T630mA
L901
J1
J2
T901
E
R901
PCB-POWER

⚠

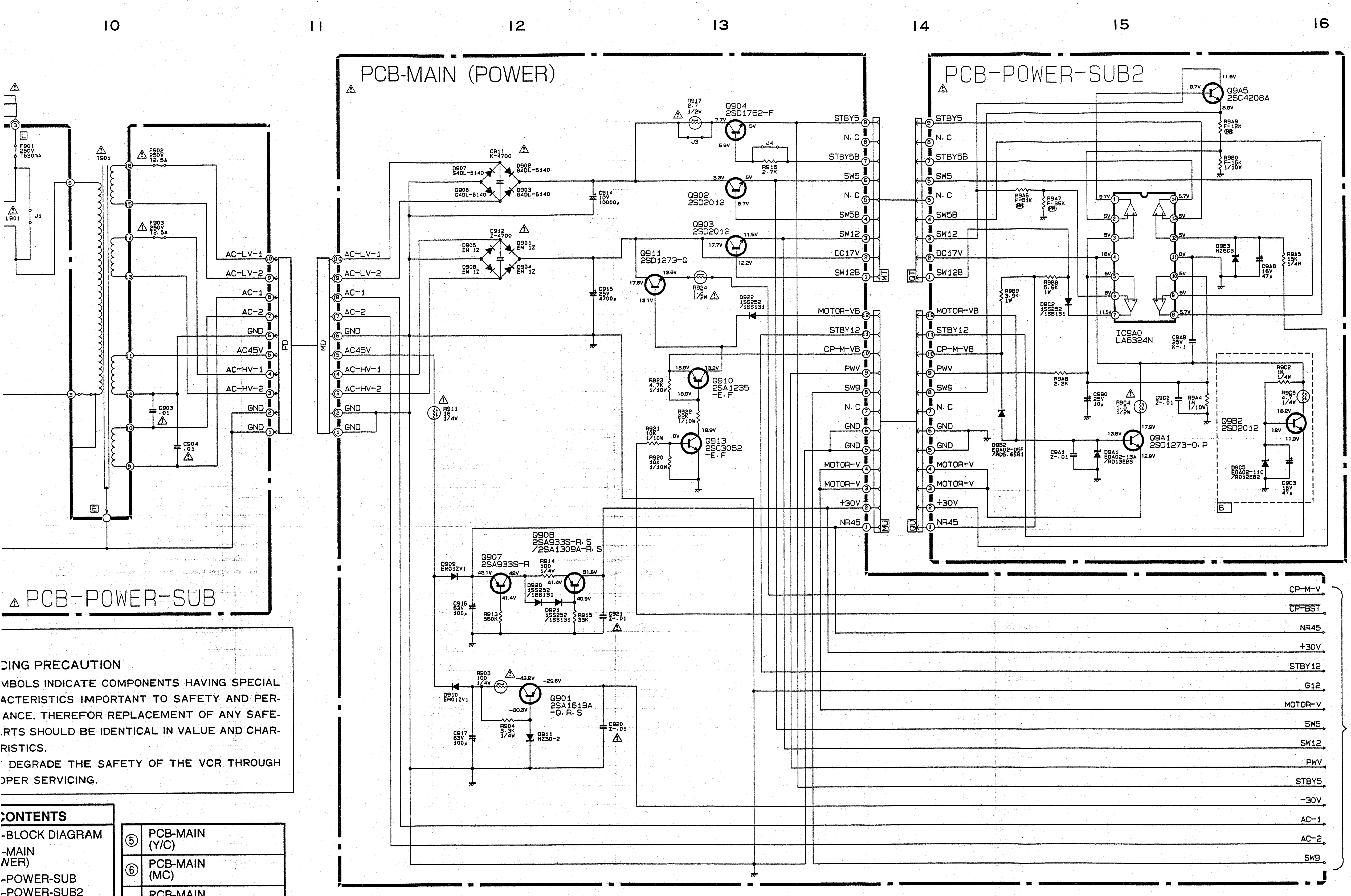
**SERVICING PRECAUTION**

SYMBOLS INDICATE COMPONE
CHARACTERISTICS IMPORTANT T
FORMANCE. THEREFOR REPLACE
TY PARTS SHOULD BE IDENTICAL
ACTERISTICS.
DON'T DEGRADE THE SAFETY OF
IMPROPER SERVICING.

**CONTENTS**

| | |
|---|---|
| ① | PCB-BLOCK DIAGRAM<br>PCB-MAIN (POWER)<br>PCB-POWER-SUB<br>PCB-POWER-SUB2 |
| ② | PCB-MAIN (TUNER/VIF)<br>PCB-HIFI/DEC/NICAM (DEC/NICAM) |
| ③ | PCB-HIFI/DEC/NICAM (HIFI)<br>PCB-SAT |
| ④ | PCB-CONNECTOR<br>PCB-HEAD AMP/AUDIO |

| | |
|---|---|
| ⑤ | PC<br>(Y |
| ⑥ | PC<br>(M |
| ⑦ | PC<br>(S<br>(C |
| ⑧ | PC |
| ⑨ | TF<br>RI |


10
11
12
13
14
15
16
PCB-MAIN (POWER)
PCB-POWER-SUB2
PCB-POWER-SUB
T901
F901 250V T630mA
F902 250V T2.5A
F903 250V T2.5A
L901
J1
C903 .01
C904 .01
AC-LV-1
AC-LV-2
AC-1
AC-2
GND
AC45V
AC-HV-1
AC-HV-2
PD
MD
D907 S4DL-6140
D902 S4DL-6140
D905 S4DL-6140
D903 S4DL-6140
C911 K-4700
C912 Z-4700
D906 EM 1Z
D901 EM 1Z
D908 EM 1Z
D904 EM 1Z
C914 10V 10000μ
C915 25V 4700μ
R917 2.7 1/2W
J3
Q904 2SD1762-F
J4
R916 2.7K
Q902 2SD2012
Q903 2SD2012
Q911 2SD1273-Q
R924 1.2 1/2W
D922 1SS252 /1SS131
Q910 2SA1235 -E.F
R923 4.7K 1/10W
R922 22K 1/10W
R921 10K 1/10W
R920 10K 1/10W
Q913 2SC3052 -E.F
R911 18 1/4W
Q908 2SA933S-R.S /2SA1309A-R.S
Q907 2SA933S-R
D909 EM01ZV1
R914 100 1/4W
D920 1SS252 /1SS131
D921 1SS252 /1SS131
C916 63V 100μ
R913 560K
R915 33K
C921 Z-.01
R903 100 1/4W
D910 EM01ZV1
Q901 2SA1619A -G.R.S
R904 3.3K 1/4W
D911 HZ30-2
C917 63V 100μ
C920 Z-.01
STBY5
N.C
STBY5B
SW5
SW5B
SW12
DC17V
SW12B
MOTOR-VB
STBY12
CP-M-VB
PWV
SW9
GND
MOTOR-V
+30V
NR45
MT
QT
MU
QU
Q9A5 2SC4208A
R9A9 F-12K
R9B0 F-15K 1/10W
R9A6 F-51K
R9A7 F-39K
R9B9 3.9K 1W
R9B8 5.6K 1W
D9C2 1SS252 /1SS131
IC9A0 LA6324N
C9A9 25V K-.1
D9B3 HZ6C3
C9A8 16V 47μ
R9A5 15K 1/4W
R9A8 2.2K
C9B0 25V 10μ
R9C4 1.5 1/2W
C9C2 Z-.01
R9A4 1M 1/10W
D9B2 EQA02-05F /RD5.6EB1
C9A1 Z-.01
D9A1 EQA02-13A /RD13EB3
Q9A1 2SD1273-O.P
Q9B2 2SD2012
R9C2 1K 1/4W
R9C5 4.7 1/4W
D9C5 EQA02-11C /RD12EB2
C9C3 16V 47μ
B
E
CP-M-V
CP-BST
NR45
+30V
STBY12
S12
MOTOR-V
SW5
SW12
PWV
STBY5
-30V
AC-1
AC-2
SW9
TO MC

CING PRECAUTION

VIBOLS INDICATE COMPONENTS HAVING SPECIAL ACTERISTICS IMPORTANT TO SAFETY AND PER-ANCE. THEREFOR REPLACEMENT OF ANY SAFE-.RTS SHOULD BE IDENTICAL IN VALUE AND CHAR-RISTICS.

' DEGRADE THE SAFETY OF THE VCR THROUGH DPER SERVICING.

CONTENTS

-BLOCK DIAGRAM
-MAIN
WER)
-POWER-SUB
-POWER-SUB2
-MAIN
NER/VIF)
-HIFI/DEC/NICAM
C/NICAM)
-HIFI/DEC/NICAM
I)
-SAT
-CONNECTOR
-HEAD AMP/AUDIO

⑤ PCB-MAIN (Y/C)
⑥ PCB-MAIN (MC)
⑦ PCB-MAIN (SERVO) (CG/VPS)
⑧ PCB-TIMER
⑨ TRANSMITTER REMOTE CONTROL

○ : EMPLOYED × : NOT EMPLOYED

| MODEL \ SYMBOL | J1 | R916 | J2 | R917 | J3 | B | J4 | L901 |
|---|---|---|---|---|---|---|---|---|
| HS-551V(Y)/V(E)/V(G) | × | ○ | × | × | ○ | ○ | × | ○ |
| HS-551V(B)/HS-550V(B) | × | × | × | ○ | × | × | ○ | ○ |
| HS-551V(IR) | × | ○ | × | × | ○ | × | × | ○ |
| HS-551V(A)/V(NZ) | ○ | ○ | ○ | × | ○ | × | × | × |

HS-550V(B)
HS-551V(B)/V(G)/V(E)/V(Y)/V(IR)

①

# SCHEMATIC DIAGRAM

**• NOTE**

1. Each voltage should be within ±20% of the DC voltages measured with a digital voltmeter.
2. The voltages parenthesised are on SP recording mode. While those without parenthesised on SP play back mode.
3. Waveforme were taken with standard colour bar signal.
4. TP6A, etc. show Test Points.

5. CAPACITORS

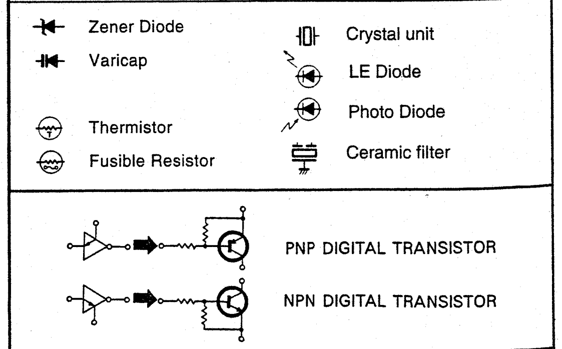
| | | | |
|---|---|---|---|
| Value | Not indicated | | PF, for numbers more than 1<br>μF, for numbers less than 1 |
| Dielectric Strength | Not indicated :50V | | |
| Tolerance | Not indicated =±10% | | No Tolerance is indicated for electrolytic capacitors and ±20% |
| | G=±2%<br>J =±5%<br>K=±10%<br>M=±20% | P=+100% −0%<br>Z=+80% −20% | Q=+30% −10%<br>T=+200% −0%<br>C=±0.25PF<br>D=±0.5PF<br>F=±1PF<br>G=±2PF |
| Sort | I | Parts except for chips | Not indicated : Ceramic capacitor<br>(MF) : Polyester capacitor<br>(PP) : Polypropylene film capacitor<br>(ALM) : Aluminus electrolytic capacitor<br>(TF) : Twin film capacitor<br>(SC) : Semiconductor ceramic capacitor<br>(MP) : Metalized paper<br>(MPP) : Metalized plastic film capacitor<br>(MMF) : Metalized polyester capacitor<br>(MF.PP) : Polyester polypropylene film capacitor<br>(PS) : Styrol capacitor<br>(TAN)or(TANT) : Tantalum capacitor<br>—⫞— : Electrolytic capacitor<br>(BP)or(NP) : Non polarized electrolytic capacitor |
| | II | Chips | Not indicated : Ceramic capacitor chip<br>—⫞— : Electrolytic capacitor<br>(BP)or(NP) : Non polarized electrolytic capacitor chip |
| Characteristic (only ceramic capacitor) | Not indicated : F or B(high dielectric percentage)<br>CH,SL,etc. : Temperature compensating types | | |

6. Resistors

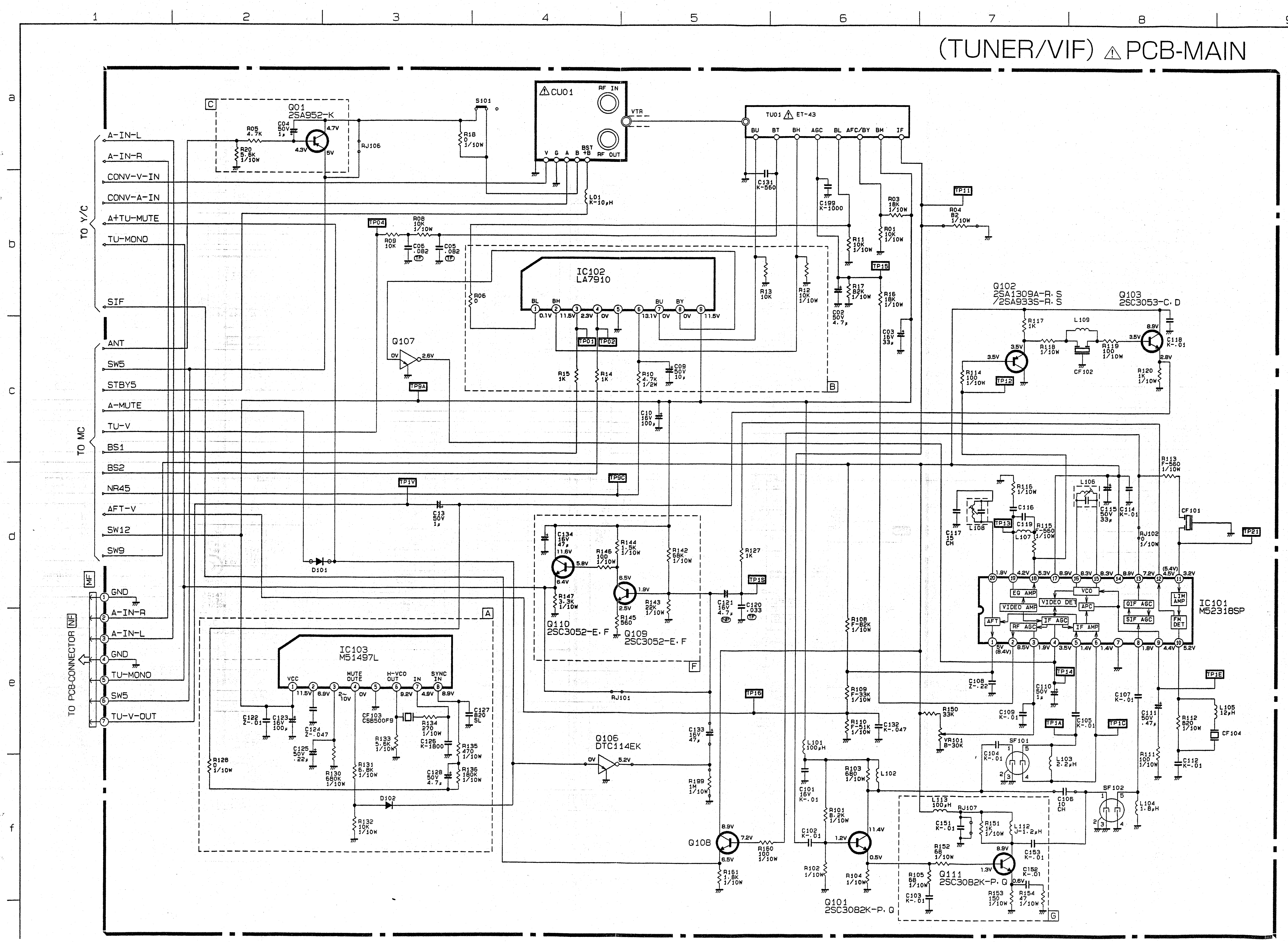
| | | | |
|---|---|---|---|
| Value | Not indicated = Ω<br>K = kΩ(1000Ω)<br>M = MΩ(1000kΩ) | | |
| Wattage | Parts except for chips | Not indicated = 1/4W or 1/6W | |
| | Chips | Not indicated = 1/10W | |
| Tolerance | Not indicated =±5%<br>D=±0.5% J=±5%<br>F=±1% K=±10% | | |
| Short | I | Parts except for chips | Not indicated : Carbon resistor<br>(S) : Fixed composition resistor<br>(MB) : Metal oxide film resistor(type B)<br>(CE) : Cemented resister<br>(W) : Wire wound resister<br>(M) : Metal film resister<br>(MPC) : Metal plate cement resister<br>(ML) : Metal liner resister |
| | II | Chip | Not indicated : Chip resistor |

7. This is a basic schematic diagram. Some sets may be subject to modification according to engineering improvement.

**SPECIFIC SYMBOL**


Zener Diode
Varicap
Thermistor
Fusible Resistor
Crystal unit
LE Diode
Photo Diode
Ceramic filter
PNP DIGITAL TRANSISTOR
NPN DIGITAL TRANSISTOR

# (TUNER/VIF) ⚠ PCB-MAIN

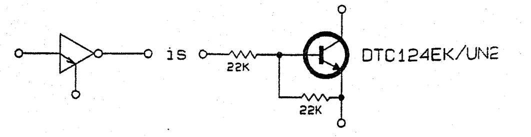

1
2
3
4
5
6
7
8
9
10
a
b
c
d
e
f
TO Y/C
A-IN-L
A-IN-R
CONV-V-IN
CONV-A-IN
A+TU-MUTE
TU-MONO
SIF
TO MC
ANT
SW5
STBY5
A-MUTE
TU-V
BS1
BS2
NR45
AFT-V
SW12
SW9
TO PCB-CONNECTOR NF
MF
GND
A-IN-R
A-IN-L
GND
TU-MONO
SW5
TU-V-OUT
Q01
2SA952-K
RJ106
S101
⚠CU01
RF IN
RF OUT
VTR
TU01 ⚠ ET-43
BU BT BH AGC BL AFC/BY BH IF
IC102
LA7910
Q107
IC103
M51497L
VCC
MUTE OUTE
H-VCO OUT
IN
SYNC IN
CF103 CSB500F9
Q106
DTC114EK
D101
D102
RJ101
Q110
2SC3052-E, F
Q109
2SC3052-E, F
Q108
Q101
2SC3082K-P, Q
Q111
2SC3082K-P, Q
Q102
2SA1309A-R, S
/2SA933S-R, S
Q103
2SC3053-C, D
CF101
CF102
CF104
SF101
SF102
VR101
B-30K
IC101
M52318SP
EQ AMP
VIDEO AMP
VIDEO DET
VCO
APC
AFT
RF AGC
IF AGC
IF AMP
QIF AGC
SIF AGC
LIM AMP
FM DET
TP04
TP11
TP15
TP01
TP02
TP9A
TP9C
TP1V
TP13
TP12
TP14
TP16
TP1S
TP1A
TP1C
TP1E
TP21
A
B
C
F
G

○: Employed ╳: Not employed

| SYMBOL | MODEL / ADDRESS | (Y) | (B) | (E) | (IR) |
|---|---|---|---|---|---|
| A | e-5 | ○ | ╳ | ○ | ╳ |
| B | c-6 | ○ | ╳ | ○ | ○ |
| C | a-1 | ╳ | ╳ | ╳ | ╳ |
| F | d-5 | ○ | ╳ | ○ | ╳ |
| G | g-8 | ╳ | ╳ | ○ | ○ |
| C106 | f-8 | ○ | ○ | ╳ | ╳ |
| C116 | d-7 | ╳ | ╳ | ╳ | ╳ |
| C119 | d-7 | 18SL | 15SL | 18SL | 15SL |
| C133 | d-3 | ○ | ╳ | ○ | ╳ |
| D101 | d-2 | ○ | ╳ | ○ | ╳ |
| L102 | f-7 | J-1.2μH | J-1.2μH | J-2.2μH | J-1.2μH |
| L107 | d-7 | J-39μH | J-56μH | J-39μH | J-47μH |
| L109 | c-8 | J-5.6μH | J-8.2μH | J-5.6μH | J-8.2μH |
| Q106 | e-3 | ○ | ╳ | ○ | ╳ |
| Q107 | c-3 | ○ | ╳ | ○ | ╳ |
| R04 | b-7 | ╳ | ○ | ╳ | ○ |
| R18 | a-4 | ╳ | ╳ | ╳ | ╳ |
| R102 | f-6 | 1K | 1K | 1.8K | 1.8K |
| R104 | f-6 | 68 | 68 | 220 | 220 |
| R116 | d-7 | ╳ | ╳ | ╳ | ╳ |
| R118 | c-8 | F-150 | F-390 | F-150 | F-330 |
| R199 | d-3 | ○ | ╳ | ○ | ╳ |
| RJ101 | e-5 | ╳ | ○ | ╳ | ○ |
| RJ106 | a-3 | ○ | ○ | ○ | ○ |
| RJ107 | f-7 | ○ | ○ | ╳ | ╳ |
| S101 | a-4 | ○ | ○ | ○ | ○ |

(B) : Means HS-551V(B) and HS-550V(B)

ALL NPN TRANSISTORS ARE 2SC3052-E, F UNLESS
ALL DIODES ARE 1SS252/1SS131 UNLESS OTHE


is
22K
22K
DTC124EK/UN2

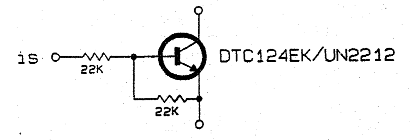
10 11

Employed × : Not employed

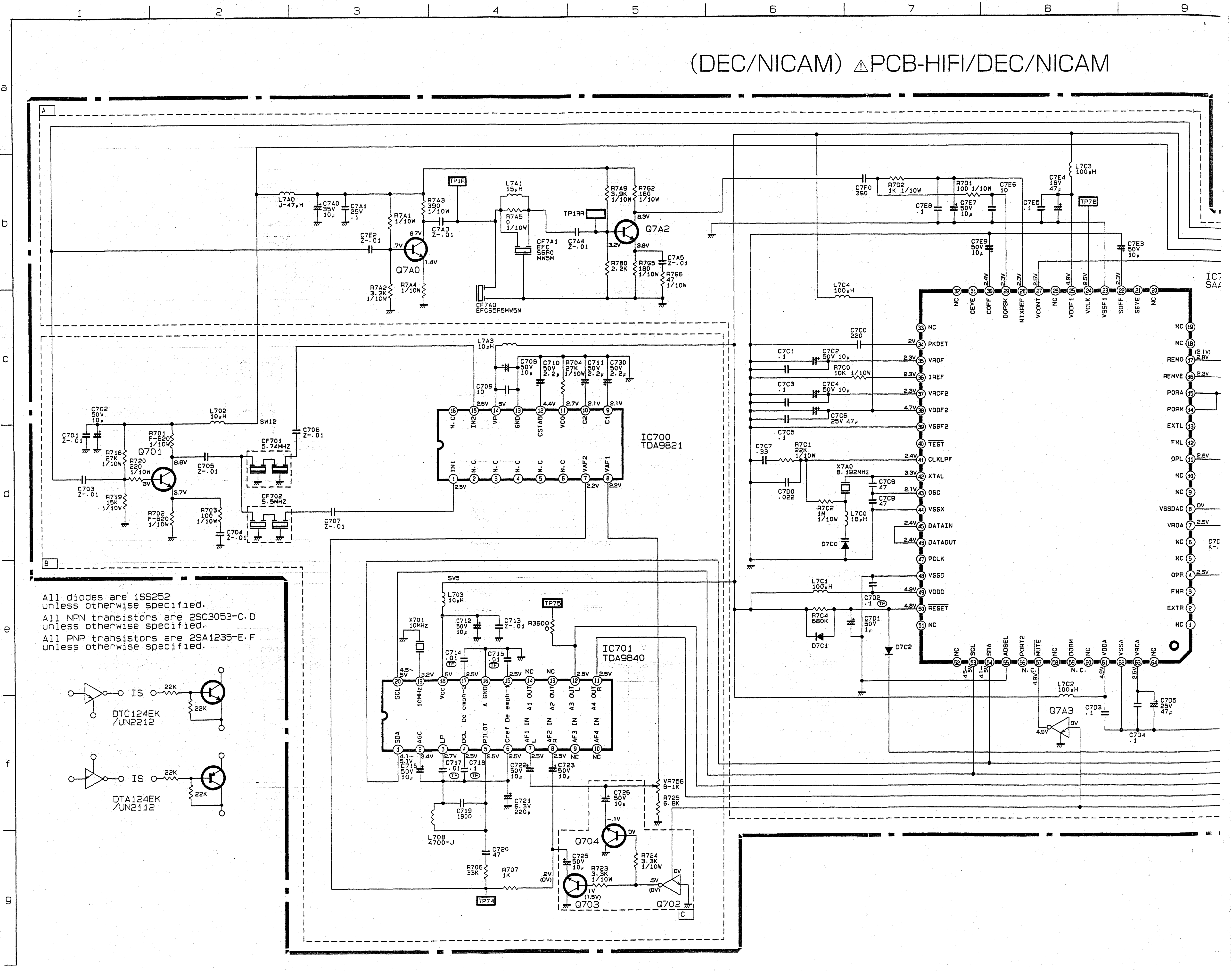
| MODEL / ADDRESS | (Y) | (B) | (E) | (IR) | (G) | (A) | (NZ) |
|---|---|---|---|---|---|---|---|
| e-5 | ○ | × | ○ | × | ○ | × | × |
| c-6 | ○ | × | ○ | ○ | ○ | ○ | ○ |
| a-1 | × | × | × | × | × | ○ | ○ |
| d-5 | ○ | × | ○ | × | ○ | × | × |
| g-8 | × | × | ○ | ○ | × | × | ○ |
| f-8 | ○ | ○ | × | × | ○ | ○ | × |
| d-7 | × | × | × | × | × | × | 33SL |
| d-7 | 18SL | 15SL | 18SL | 15SL | 18SL | 15SL | 12SL |
| d-3 | ○ | × | ○ | × | ○ | × | × |
| d-2 | ○ | × | ○ | × | ○ | × | × |
| f-7 | J-1.2μH | J-1.2μH | J-2.2μH | J-1.2μH | J-1.2μH | J-2.2μH | J-1.2μH |
| d-7 | J-39μH | J-56μH | J-39μH | J-47μH | J-39μH | J-47μH | J-39μH |
| c-8 | J-5.6μH | J-8.2μH | J-5.6μH | J-8.2μH | J-5.6μH | J-5.6μH | J-5.6μH |
| e-3 | ○ | × | ○ | × | ○ | × | × |
| c-3 | ○ | × | ○ | × | ○ | × | × |
| b-7 | × | ○ | × | ○ | × | ○ | ○ |
| a-4 | × | × | × | × | × | ○ | ○ |
| f-6 | 1K | 1K | 1.8K | 1.8K | 1K | 1K | 1.8K |
| f-6 | 68 | 68 | 220 | 220 | 68 | 68 | 220 |
| d-7 | × | × | × | × | × | × | 0Ω |
| c-8 | F-150 | F-390 | F-150 | F-330 | F-150 | F-180 | F-220 |
| d-3 | ○ | × | ○ | × | ○ | × | × |
| e-5 | × | ○ | × | ○ | × | ○ | ○ |
| a-3 | ○ | ○ | ○ | ○ | ○ | × | × |
| f-7 | ○ | ○ | × | × | ○ | × | × |
| a-4 | ○ | ○ | ○ | ○ | ○ | × | × |

leans HS-551V(B) and HS-550V(B)

ISTORS ARE 2SC3052-E.F UNLESS OTHERWISE SPECIFIED.
RE 1SS252/1SS131 UNLESS OTHERWISE SPECIFIED.


IS
22K
22K
DTC124EK/UN2212

# (DEC/NICAM) ⚠PCB-HIFI/DEC/NICAM


1
2
3
4
5
6
7
8
9
a
b
c
d
e
f
g
A
B
C
IC700
TDA9821
IC701
TDA9840
Q7A0
Q7A2
Q7A3
Q701
Q702
Q703
Q704
TP1R
TP1RR
TP74
TP75
TP76
L7A0 J-47μH
L7A1 15μH
L7A3 10μH
L702 10μH
L703 10μH
L708 4700-J
L7C0 18μH
L7C1 100μH
L7C2 100μH
L7C3 100μH
L7C4 100μH
CF7A0 EFCS5R5MW5M
CF7A1 EFC S5R0 MW5M
CF701 5.74MHZ
CF702 5.5MHZ
X701 10MHz
X7A0 8.192MHz
SW12
SW5
VR756 B-1K
R725 6.8K
IN1
IN2
N.C
VP
GND
CSTAB
VCO
C2
C1
VAF1
VAF2
SCL
10MHz
Vcc
De emph-
A GND
Cref
A1 OUT
A2 OUT
A3 OUT
A4 OUT
SDA
AGC
LP
DCL
PILOT
AF1 IN
AF2 IN
AF3 IN
AF4 IN
NC
PKDET
VROF
IREF
VRCF2
VDDF2
VSSF2
TEST
CLKLPF
XTAL
OSC
VSSX
DATAIN
DATAOUT
PCLK
VSSD
VDDD
RESET
CEYE
COFF
DOPSK
MIXREF
VCONT
VDDF1
VCLK
VSSF1
SOFF
SEYE
ADSEL
PORT2
MUTE
DOBM
VDDA
VSSA
VRCA
REMO
REMVE
PORA
PORM
EXTL
FML
OPL
VSSDAC
VRDA
OPR
FMR
EXTR
IC7
SA
DTC124EK
/UN2212
DTA124EK
/UN2112
IS
22K

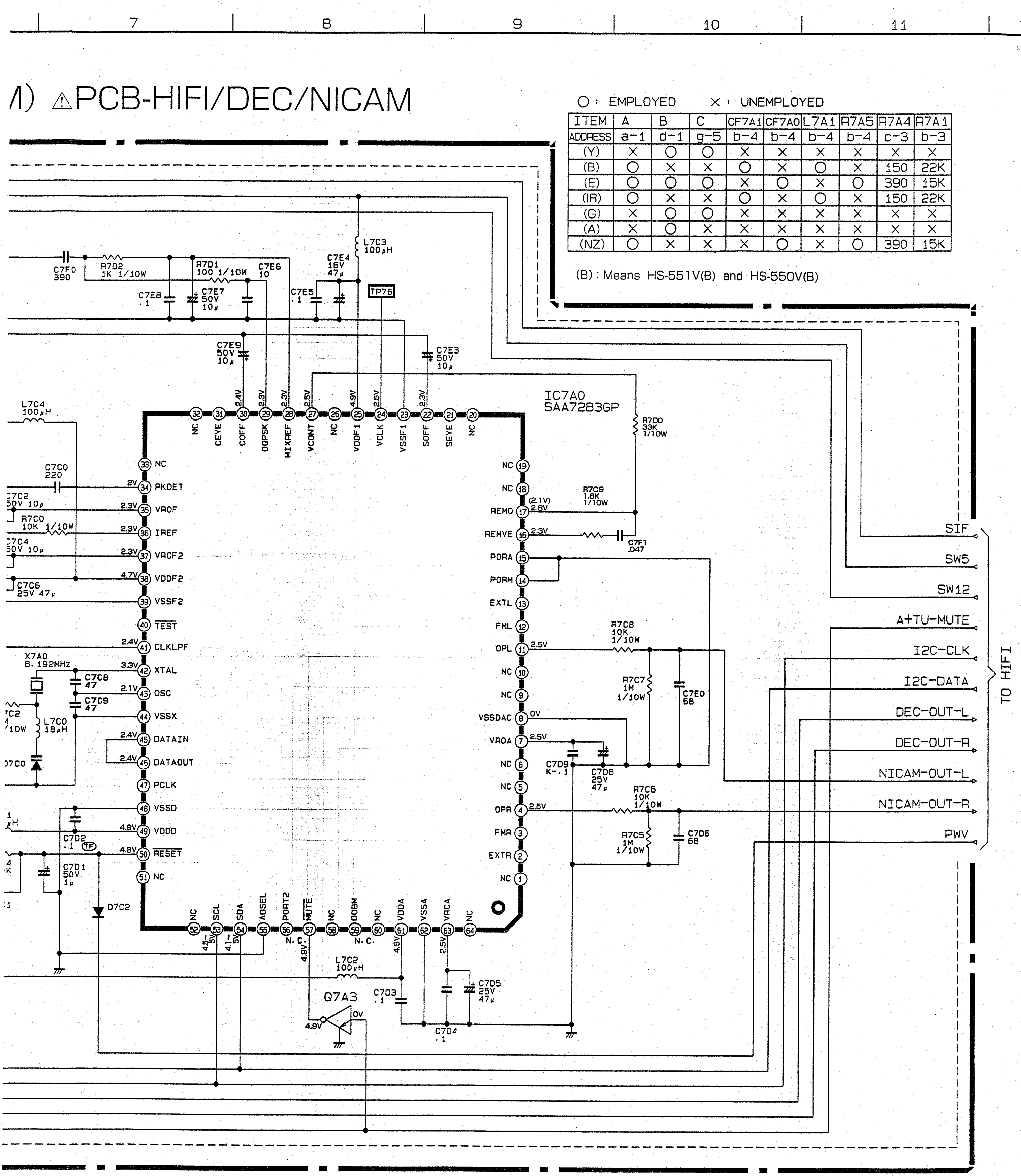
All diodes are 1SS252 unless otherwise specified.
All NPN transistors are 2SC3053-C.D unless otherwise specified.
All PNP transistors are 2SA1235-E.F unless otherwise specified.

# /\) ⚠PCB-HIFI/DEC/NICAM

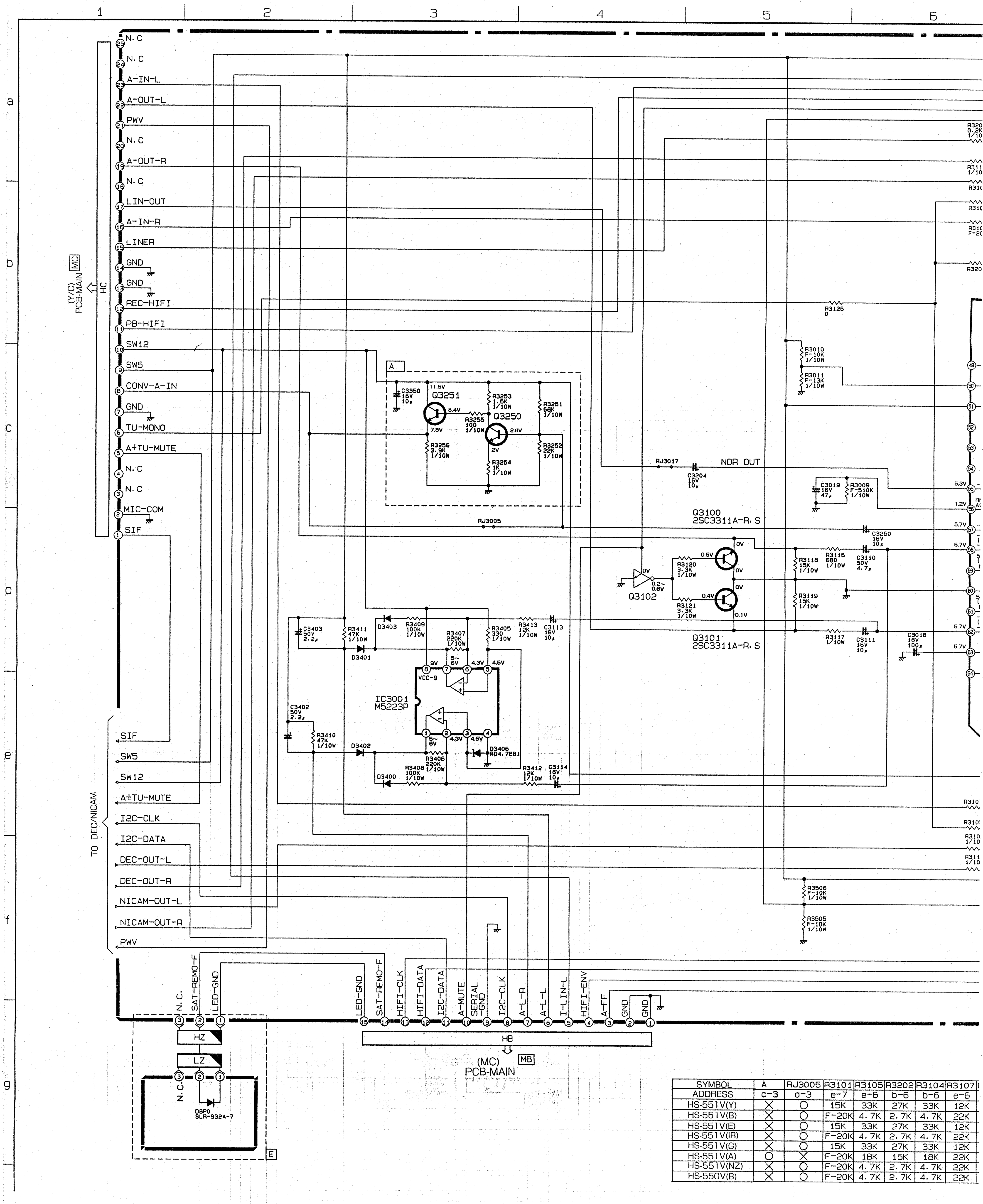
○ : EMPLOYED    × : UNEMPLOYED

| ITEM | A | B | C | CF7A1 | CF7A0 | L7A1 | R7A5 | R7A4 | R7A1 |
|---|---|---|---|---|---|---|---|---|---|
| ADDRESS | a-1 | d-1 | g-5 | b-4 | b-4 | b-4 | b-4 | c-3 | b-3 |
| (Y) | × | ○ | ○ | × | × | × | × | × | × |
| (B) | ○ | × | × | ○ | × | ○ | × | 150 | 22K |
| (E) | ○ | ○ | ○ | × | ○ | × | ○ | 390 | 15K |
| (IR) | ○ | × | × | ○ | × | ○ | × | 150 | 22K |
| (G) | × | ○ | ○ | × | × | × | × | × | × |
| (A) | × | ○ | × | × | × | × | × | × | × |
| (NZ) | ○ | × | × | × | ○ | × | ○ | 390 | 15K |

(B) : Means HS-551V(B) and HS-550V(B)

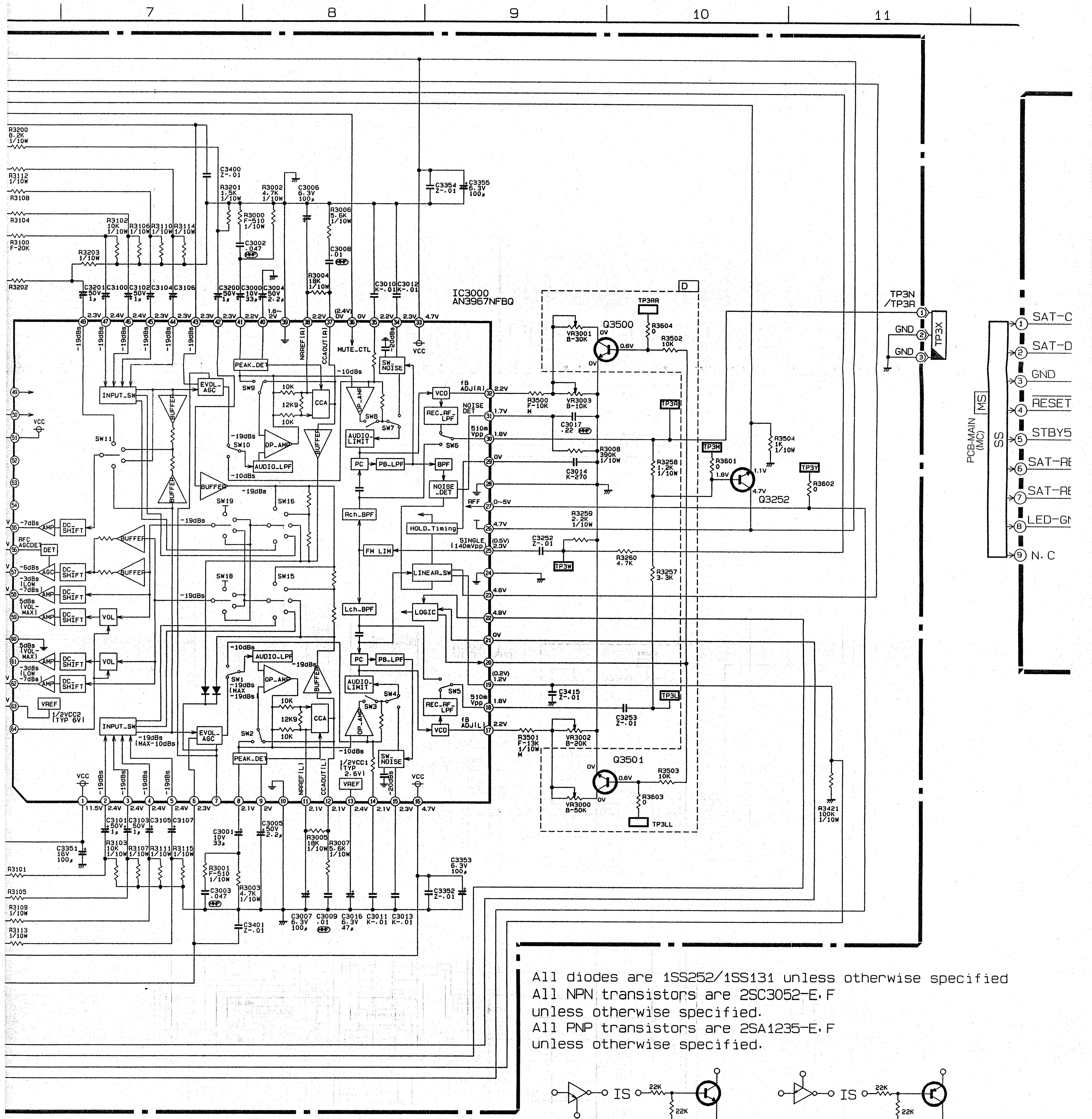


7
8
9
10
11
IC7A0
SAA7283GP
C7F0 390
R7D2 1K 1/10W
R7D1 100 1/10W
C7E6 10
C7E8 .1
C7E7 50V 10µ
C7E4 16V 47µ
L7C3 100µH
C7E5 .1
TP76
C7E9 50V 10µ
C7E3 50V 10µ
R7D0 33K 1/10W
L7C4 100µH
C7C0 220
C7C2 50V 10µ
R7C0 10K 1/10W
C7C4 50V 10µ
C7C6 25V 47µ
X7A0 8.192MHz
C7C8 47
C7C9 47
L7C0 18µH
D7C0
C7D2 .1
TF
C7D1 50V 1µ
D7C2
NC
CEYE
COFF
DQPSK
MIXREF
VCONT
NC
VDDF1
VCLK
VSSF1
SOFF
SEYE
NC
2.4V
2.3V
2.3V
2.5V
4.9V
2.5V
2.3V
NC
PKDET
VROF
IREF
VRCF2
VDDF2
VSSF2
TEST
CLKLPF
XTAL
OSC
VSSX
DATAIN
DATAOUT
PCLK
VSSD
VDDD
RESET
NC
2V
2.3V
2.3V
2.3V
4.7V
2.4V
3.3V
2.1V
2.4V
2.4V
4.9V
4.8V
NC
NC
REMO
REMVE
PORA
PORM
EXTL
FML
OPL
NC
NC
VSSDAC
VROA
NC
NC
OPR
FMR
EXTR
NC
(2.1V) 2.8V
2.3V
2.5V
0V
2.5V
2.5V
R7C9 1.8K 1/10W
C7F1 .047
R7C8 10K 1/10W
R7C7 1M 1/10W
C7E0 68
C7D9 K-.1
C7D8 25V 47µ
R7C6 10K 1/10W
R7C5 1M 1/10W
C7D6 68
NC
SCL
SDA
ADSEL
PORT2
MUTE
NC
DQBM
NC
VDDA
VSSA
VRCA
NC
4.5~5V
4.1~5V
N.C.
N.C.
4.9V
4.9V
2.5V
L7C2 100µH
C7D3 .1
C7D5 25V 47µ
C7D4 .1
Q7A3
4.9V
0V
SIF
SW5
SW12
A+TU-MUTE
I2C-CLK
I2C-DATA
DEC-OUT-L
DEC-OUT-R
NICAM-OUT-L
NICAM-OUT-R
PWV
TO HIFI


1
2
3
4
5
6
a
b
c
d
e
f
g
(Y/C) PCB-MAIN MC
HC
N.C
N.C
A-IN-L
A-OUT-L
PWV
N.C
A-OUT-R
N.C
LIN-OUT
A-IN-R
LINER
GND
GND
REC-HIFI
PB-HIFI
SW12
SW5
CONV-A-IN
GND
TU-MONO
A+TU-MUTE
N.C
N.C
MIC-COM
SIF
A
C3350 16V 10μ
11.5V
Q3251
8.4V
7.8V
R3253 1.5K 1/10W
R3255 100 1/10W
Q3250
2.6V
2V
R3251 68K 1/10W
R3252 22K 1/10W
R3256 3.9K 1/10W
R3254 1K 1/10W
RJ3005
RJ3017
C3204 16V 10μ
NOR OUT
C3019 16V 47μ
R3009 F-510K 1/10W
Q3100 2SC3311A-R, S
Q3102
0V
0.2~0.6V
0.5V
0.4V
0.1V
R3120 3.3K 1/10W
R3121 3.3K 1/10W
Q3101 2SC3311A-R, S
R3118 15K 1/10W
R3116 680 1/10W
C3250 16V 10μ
C3110 50V 4.7μ
R3119 15K 1/10W
R3117 1/10W
C3111 16V 10μ
C3018 16V 100μ
R3126 0
R3010 F-10K 1/10W
R3011 F-13K 1/10W
5.3V
1.2V
5.7V
5.7V
5.7V
5.7V
C3403 50V 2.2μ
R3411 47K 1/10W
D3403
D3401
R3409 100K 1/10W
R3407 220K 1/10W
R3405 330 1/10W
R3413 12K 1/10W
C3113 16V 10μ
9V
5~6V
4.3V
4.5V
VCC-9
IC3001 M5223P
C3402 50V 2.2μ
R3410 47K 1/10W
D3402
D3400
R3408 100K 1/10W
R3406 220K 1/10W
D3406 RD4.7EB1
R3412 12K 1/10W
C3114 16V 10μ
R3506 F-10K 1/10W
R3505 F-10K 1/10W
TO DEC/NICAM
SIF
SW5
SW12
A+TU-MUTE
I2C-CLK
I2C-DATA
DEC-OUT-L
DEC-OUT-R
NICAM-OUT-L
NICAM-OUT-R
PWV
N.C.
SAT-REMO-F
LED-GND
HZ
LZ
N.C.
DBP0 SLR-932A-7
E
LED-GND
SAT-REMO-F
HIFI-CLK
HIFI-DATA
I2C-DATA
A-MUTE
SERIAL-GND
I2C-CLK
A-L-R
A-L-L
I-LIN-L
HIFI-ENV
A-FF
GND
GND
HB
(MC) PCB-MAIN
MB

| SYMBOL | A | RJ3005 | R3101 | R3105 | R3202 | R3104 | R3107 |
|---|---|---|---|---|---|---|---|
| ADDRESS | c-3 | d-3 | e-7 | e-6 | b-6 | b-6 | e-6 |
| HS-551V(Y) | ╳ | ○ | 15K | 33K | 27K | 33K | 12K |
| HS-551V(B) | ╳ | ○ | F-20K | 4.7K | 2.7K | 4.7K | 22K |
| HS-551V(E) | ╳ | ○ | 15K | 33K | 27K | 33K | 12K |
| HS-551V(IR) | ╳ | ○ | F-20K | 4.7K | 2.7K | 4.7K | 22K |
| HS-551V(G) | ╳ | ○ | 15K | 33K | 27K | 33K | 12K |
| HS-551V(A) | ○ | ╳ | F-20K | 18K | 15K | 18K | 22K |
| HS-551V(NZ) | ╳ | ○ | F-20K | 4.7K | 2.7K | 4.7K | 22K |
| HS-550V(B) | ╳ | ○ | F-20K | 4.7K | 2.7K | 4.7K | 22K |

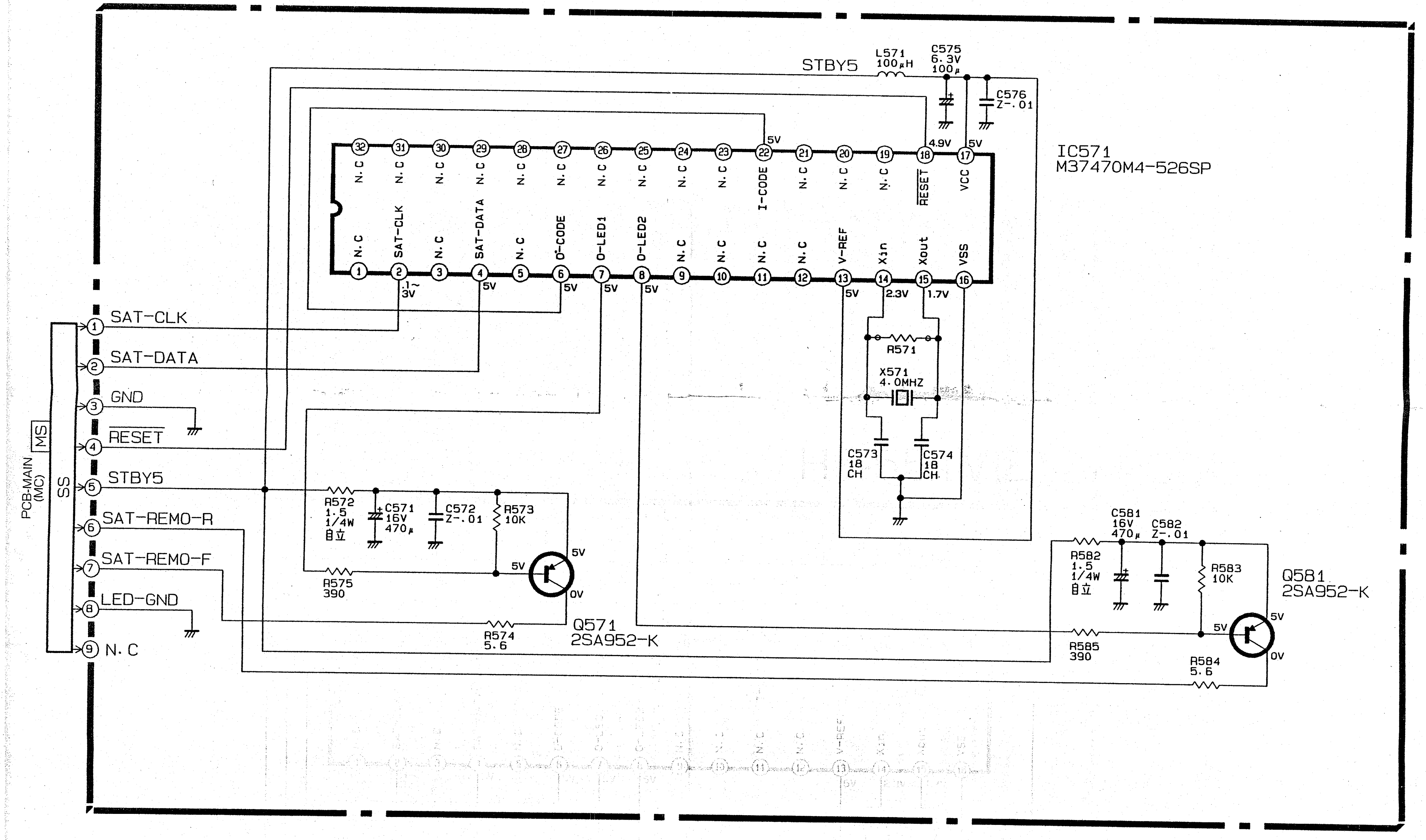
# (HIFI) ⚠PCB-HIFI/DEC/NICAM


7
8
9
10
11
IC3000
AN3967NFBQ
INPUT_SW
BUFFER
EVOL_AGC
PEAK_DET
CCA
OP_AMP
AUDIO_LPF
AUDIO_LIMIT
SW_NOISE
MUTE_CTL
VCO
REC_RF_LPF
PC
PB_LPF
BPF
NOISE_DET
Rch_BPF
Lch_BPF
HOLD_Timing
FM LIM
LINEAR_SW
LOGIC
DC_SHIFT
AMP
AGC
DET
VOL
VREF
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW15
SW16
SW18
SW19
VCC
NAREF(R)
CCAOUT(R)
NAREF(L)
CCAOUT(L)
RFC AGCDET
1/2VCC2 (TYP 6V)
1/2VCC1 (TYP 2.6V)
fB ADJ(R)
fB ADJ(L)
NOISE DET
510m Vpp
RFF
SINGLE (140mVpp)
Q3500
Q3501
Q3252
VR3001 B-30K
VR3003 B-10K
VR3002 B-20K
VR3000 B-50K
R3500 F-10K
R3501 F-13K 1/10W
R3502 10K
R3503 10K
R3504 1K 1/10W
R3601 0
R3602 0
R3603 0
R3604 0
R3008 390K 1/10W
R3258 1.2K 1/10W
R3259 2.2K 1/10W
R3260 4.7K
R3257 3.3K
R3421 100K 1/10W
C3017 .22
C3014 K-270
C3252 Z-.01
C3253 Z-.01
C3415 Z-.01
C3354 Z-.01
C3355 6.3V 100μ
C3353 6.3V 100μ
C3352 Z-.01
C3351 16V 100μ
C3400 Z-.01
C3401 Z-.01
R3200 8.2K 1/10W
R3112 1/10W
R3108
R3104
R3100 F-20K
R3202
R3203 1/10W
R3101
R3105
R3109 1/10W
R3113 1/10W
TP3RR
TP3LL
TP3R
TP3L
TP3M
TP3Y
TP3W
TP3N /TP3R
TP3X
GND
D
PCB-MAIN (MC)
MS
SS
SAT-C
SAT-D
GND
RESET
STBY5
SAT-RE
SAT-RE
LED-GN
N.C
IS
22K
22K
DTC124EK /UN2212
IS
22K
22K
DTA124EK /UN2112

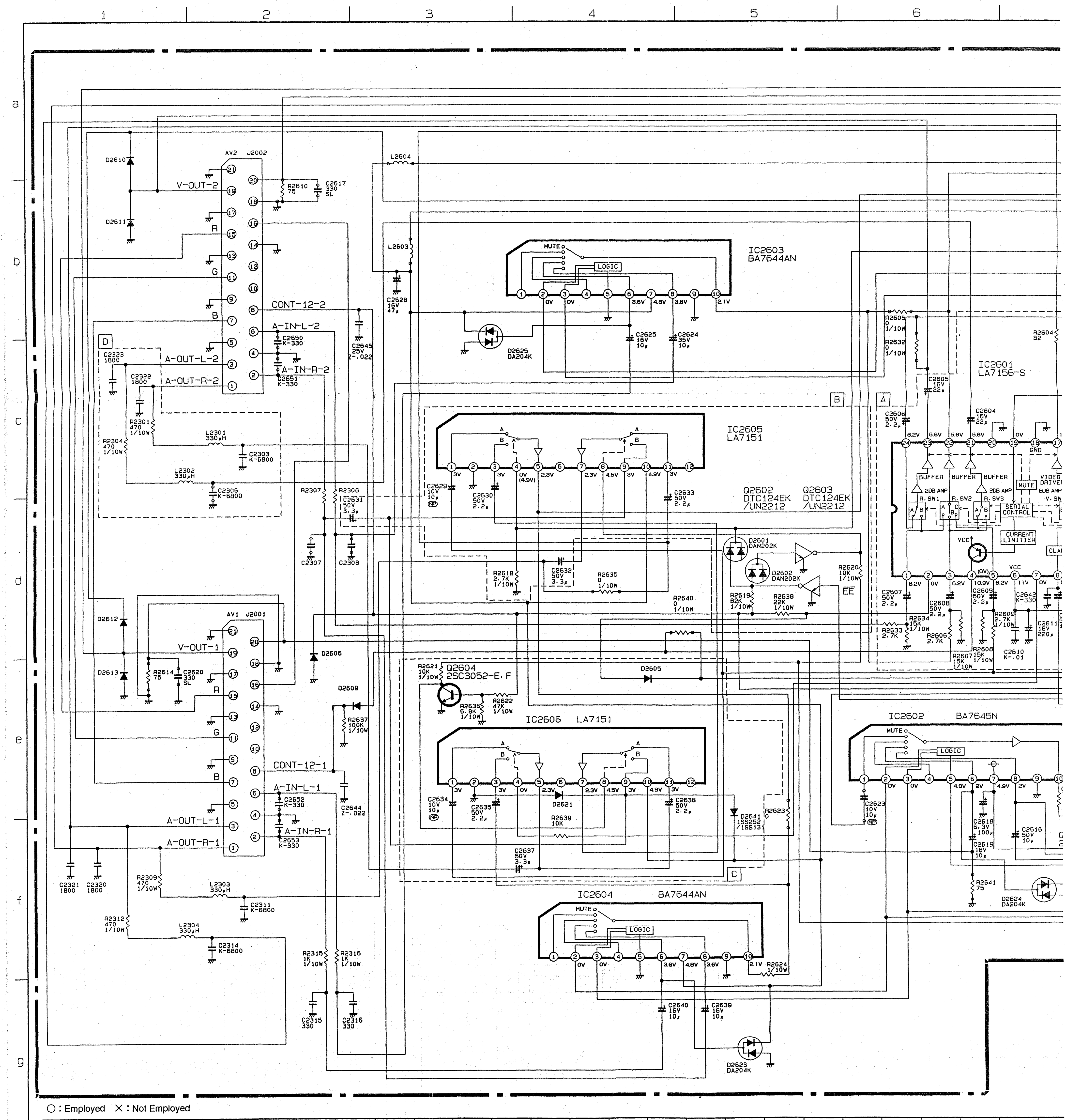
All diodes are 1SS252/1SS131 unless otherwise specified
All NPN transistors are 2SC3052-E,F
unless otherwise specified.
All PNP transistors are 2SA1235-E,F
unless otherwise specified.

| 107 | R3203 | R3106 | R3117 | E | D | R3108 | R3109 | R3110 | R3111 | C3104 | C3105 | R3112 | R3113 | R3114 | R3115 | C3106 | C3107 | C3100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -6 | b-7 | b-7 | d-5 | g-2 | b-10 | b-6 | e-6 | b-7 | e-7 | b-7 | e-7 | a-6 | f-6 | b-7 | e-7 | b-7 | e-7 | b-6 |
| 2K | 12K | 12K | 3.9K | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 27K | 27K | 6.8K | 6.8K | 50V 1μ | 50V 1μ | 50V 1μ NP |
| 2K | 22K | 22K | 680Ω | ○ | ╳ | 18K | 18K | 22K | 22K | 50V 1μ | 50V 1μ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 50V 1μ |
| 2K | 12K | 12K | 3.9K | ╳ | ○ | 18K | 18K | 22K | 22K | 50V 1μ | 50V 1μ | 27K | 27K | 6.8K | 6.8K | 50V 1μ | 50V 1μ | 50V 1μ NP |
| 2K | 22K | 22K | 680Ω | ╳ | ○ | 18K | 18K | 22K | 22K | 50V 1μ | 50V 1μ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 50V 1μ |
| 2K | 12K | 12K | 3.9K | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 27K | 27K | 6.8K | 6.8K | 50V 1μ | 50V 1μ | 50V 1μ NP |
| 2K | 22K | 22K | 680Ω | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 39K | 39K | 6.8K | 6.8K | 50V 1μ | 50V 1μ | 50V 1μ |
| 2K | 22K | 22K | 680Ω | ╳ | ○ | 18K | 18K | 22K | 22K | 50V 1μ | 50V 1μ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 50V 1μ |
| 2K | 22K | 22K | 680Ω | ╳ | ╳ | 18K | 18K | 22K | 22K | 50V 1μ | 50V 1μ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | 50V 1μ |

# HS-551V(B) ⚠PCB-SAT


STBY5
L571
100μH
C575
6.3V
100μ
C576
Z-.01
IC571
M37470M4-526SP
5V
4.9V
5V
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
N.C
N.C
N.C
N.C
N.C
N.C
N.C
N.C
N.C
N.C
I-CODE
N.C
N.C
N.C
RESET
VCC
N.C
SAT-CLK
N.C
SAT-DATA
N.C
O-CODE
O-LED1
O-LED2
N.C
N.C
N.C
N.C
V-REF
Xin
Xout
VSS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
.1~
3V
5V
5V
5V
5V
5V
2.3V
1.7V
R571
X571
4.0MHZ
C573
18
CH
C574
18
CH
PCB-MAIN
(MC)
MS
SS
1 SAT-CLK
2 SAT-DATA
3 GND
4 RESET
5 STBY5
6 SAT-REMO-R
7 SAT-REMO-F
8 LED-GND
9 N.C
R572
1.5
1/4W
自立
C571
16V
470μ
C572
Z-.01
R573
10K
5V
5V
0V
R575
390
R574
5.6
Q571
2SA952-K
C581
16V
470μ
C582
Z-.01
R582
1.5
1/4W
自立
R583
10K
Q581
2SA952-K
5V
5V
0V
R585
390
R584
5.6

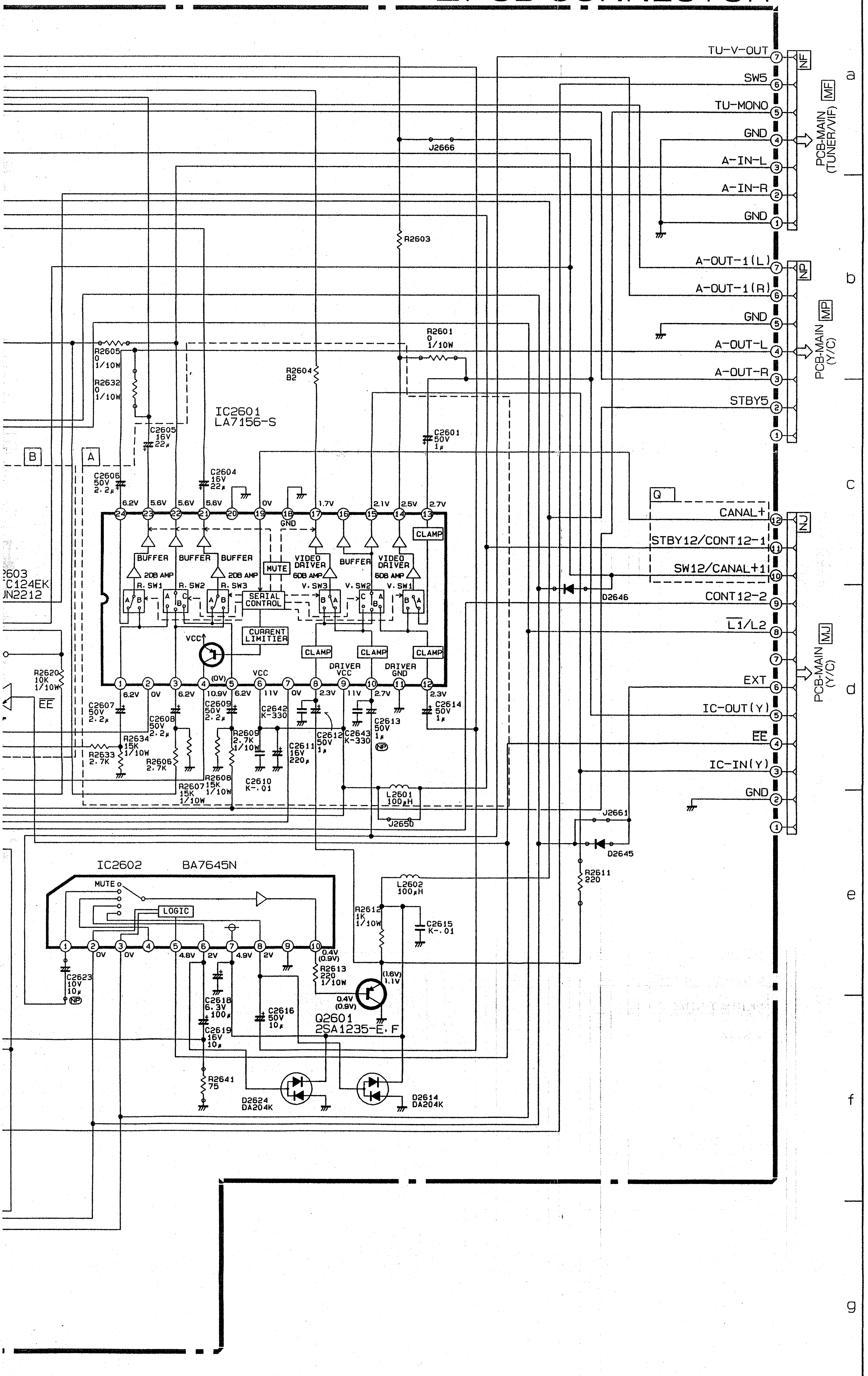
cified

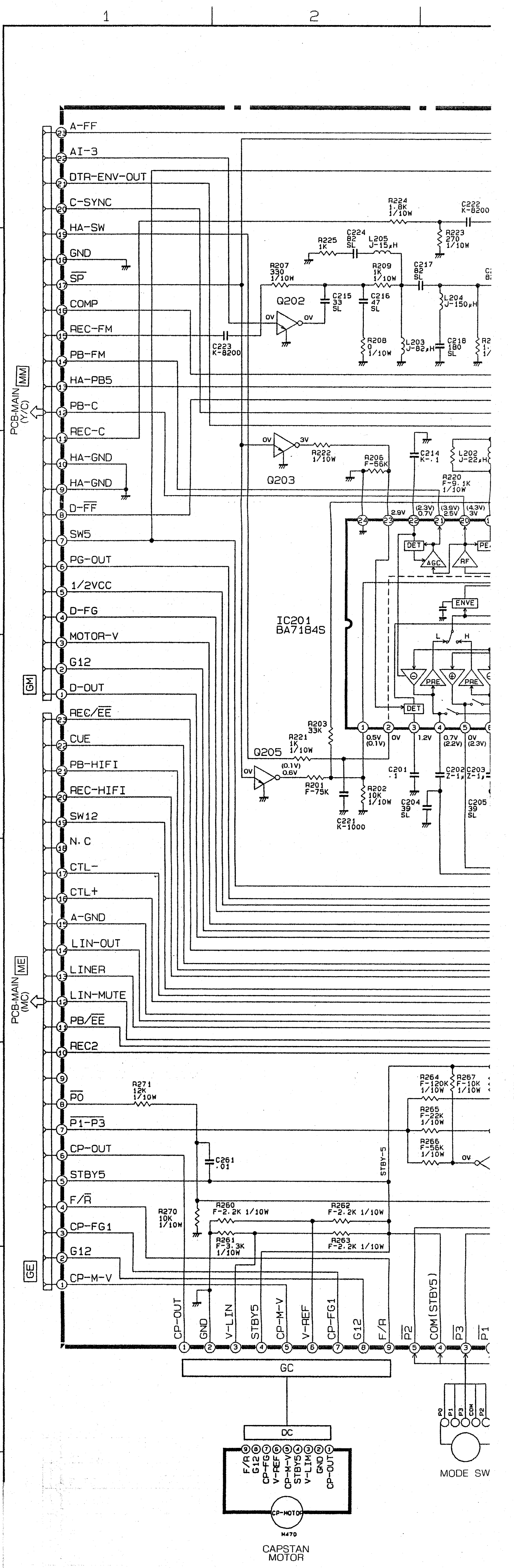

1
2
3
4
5
6
a
b
c
d
e
f
g
AV2 J2002
V-OUT-2
CONT-12-2
A-IN-L-2
A-OUT-L-2
A-OUT-R-2
A-IN-R-2
D2610
D2611
R2610 75
C2617 330 SL
L2604
L2603
C2628 16V 47μ
C2645 25V Z-.022
C2650 K-330
C2651 K-330
C2323 1800
C2322 1800
R2301 470 1/10W
R2304 470 1/10W
L2301 330μH
C2303 K-6800
L2302 330μH
C2306 K-6800
IC2603 BA7644AN
MUTE
LOGIC
D2625 DA204K
C2625 16V 10μ
C2624 35V 10μ
IC2605 LA7151
C2629 10V 10μ
C2630 50V 2.2μ
C2631 50V 3.3μ
C2633 50V 2.2μ
C2632 50V 3.3μ
R2618 2.7K 1/10W
R2635 0 1/10W
R2307
R2308
C2307
C2308
Q2602 DTC124EK /UN2212
Q2603 DTC124EK /UN2212
D2601 DAN202K
D2602 DAN202K
R2620 10K 1/10W
EE
R2619 82K 1/10W
R2638 22K 1/10W
R2640 0 1/10W
D2605
IC2601 LA7156-S
R2605 0 1/10W
R2632 0 1/10W
R2604 82
C2605 16V 22μ
C2604 16V 22μ
C2606 50V 2.2μ
BUFFER
20dB AMP
MUTE
SERIAL CONTROL
CURRENT LIMITER
VIDEO DRIVER
GND
R.SW1
R.SW2
R.SW3
V.SW
VCC
C2607 50V 2.2μ
C2608 50V 2.2μ
C2609 50V 2.2μ
C2642 K-330
C2611 16V 220μ
C2610 K-.01
R2633 2.7K
R2634 15K 1/10W
R2606 2.7K
R2607 15K 1/10W
R2608
R2609 2.7K 1/10W
AV1 J2001
V-OUT-1
CONT-12-1
A-IN-L-1
A-OUT-L-1
A-OUT-R-1
A-IN-R-1
D2612
D2613
R2614 75
C2620 330 SL
D2606
D2609
R2637 100K 1/10W
C2652 K-330
C2653 K-330
C2644 Z-.022
Q2604 2SC3052-E,F
R2621 10K 1/10W
R2636 6.8K 1/10W
R2622 47K 1/10W
IC2606 LA7151
C2634 10V 10μ
C2635 50V 2.2μ
D2621
R2639 10K
C2638 50V 2.2μ
C2637 50V 3.3μ
D2641 1SS252 /1SS133
R2623 0
IC2602 BA7645N
C2623 10V 10μ
C2618 6.3V 100μ
C2619 16V 10μ
C2616 50V 10μ
R2641 75
D2624 DA204K
C2321 1800
C2320 1800
R2309 470 1/10W
L2303 330μH
C2311 K-6800
R2312 470 1/10W
L2304 330μH
C2314 K-6800
IC2604 BA7644AN
R2315 1K 1/10W
R2316 1K 1/10W
C2315 330
C2316 330
R2624 0 1/10W
C2640 16V 10μ
C2639 16V 10μ
D2623 DA204K
A
B
C
D

○ : Employed × : Not Employed

| SYMBOL / ADDRESS / MODEL NAME | A | B | C | R2603 | R2601 | R2605 | R2632 | R2623 | C2620 | C2617 | R2635 | R2611 | R2307 | C2307 | R2308 | C2308 | J2666 | J2650 | R2640 | R2623 | Q | R2614 | R2641 | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | c-6 | c-5 | e-5 | b-7 | b-8 | b-6 | c-6 | e-6 | e-6 | b-2 | d-4 | e-8 | d-2 | d-2 | d-3 | d-3 | a-7 | e-7 | d-4 | f-5 | c-9 | e-1 | f-6 | c-1 |
| HS-551V (Y)/(E)/(G) | ○ | ○ | ○ | 82 | × | × | × | × | ○ | ○ | × | × | 1.5k<br>1/10W | K-390 | 820<br>1/10W | K-470 | × | × | × | × | ○ | × | ○ | ○ |
| HS-551V(B)/(IR)<br>HS-550V(B) | × | × | × | 0 | ○ | ○ | ○ | ○ | × | × | ○ | ○ | 1k<br>1/10W | K-330 | 1k<br>1/10W | K-330 | ○ | ○ | ○ | ○ | × | ○ | × | × |

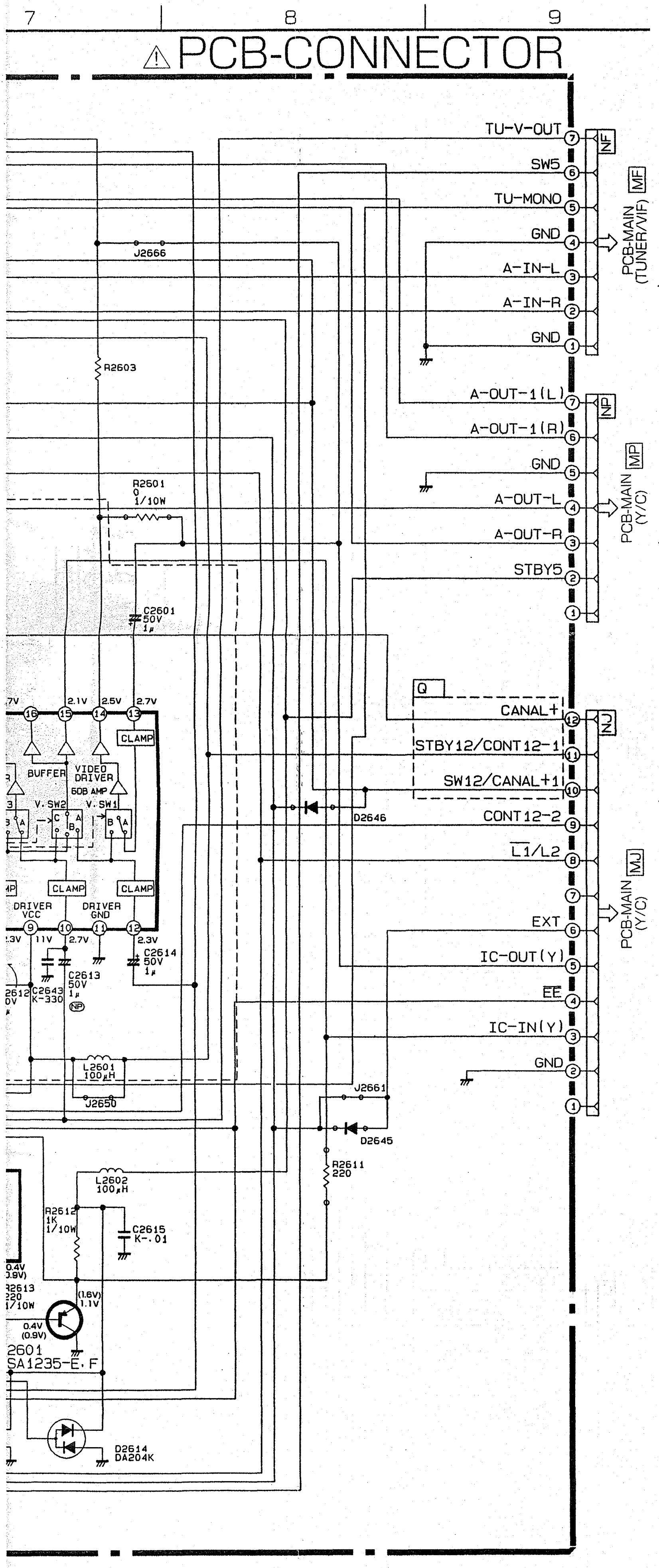
# ⚠PCB-CONNECTOR


6
7
8
9
TU-V-OUT
SW5
TU-MONO
GND
A-IN-L
A-IN-R
GND
NF
MF
PCB-MAIN (TUNER/VIF)
A-OUT-1(L)
A-OUT-1(R)
GND
A-OUT-L
A-OUT-R
STBY5
NP
MP
PCB-MAIN (Y/C)
Q
CANAL+
STBY12/CONT12-1
SW12/CANAL+1
CONT12-2
L1/L2
EXT
IC-OUT(Y)
EE
IC-IN(Y)
GND
NJ
MJ
a
b
c
d
e
f
g
J2666
R2603
R2601 0 1/10W
R2604 82
R2605 0 1/10W
R2632 0 1/10W
IC2601 LA7156-S
C2605 16V 22μ
C2606 50V 2.2μ
C2604 16V 22μ
C2601 50V 1μ
B
A
BUFFER
20dB AMP
MUTE
VIDEO DRIVER
6dB AMP
SERIAL CONTROL
CURRENT LIMITIER
CLAMP
DRIVER VCC
DRIVER GND
R.SW1
R.SW2
R.SW3
V.SW3
V.SW2
V.SW1
VCC
2603
C124EK
JN2212
R2620 10K 1/10W
C2607 50V 2.2μ
C2608 50V 2.2μ
R2634 15K 1/10W
R2633 2.7K
R2606 2.7K
R2607 15K 1/10W
R2608 15K 1/10W
C2609 50V 2.2μ
R2609 2.7K 1/10W
C2642 K-330
C2610 K-.01
C2611 16V 220μ
C2612 50V 1μ
C2643 K-330
C2613 50V 1μ
C2614 50V 1μ
L2601 100μH
J2650
D2646
J2661
D2645
R2611 220
IC2602 BA7645N
MUTE
LOGIC
L2602 100μH
R2612 1K 1/10W
C2615 K-.01
R2613 220 1/10W
Q2601 2SA1235-E.F
C2623 10V 10μ
C2618 6.3V 100μ
C2619 16V 10μ
C2616 50V 10μ
R2641 75
D2624 DA204K
D2614 DA204K

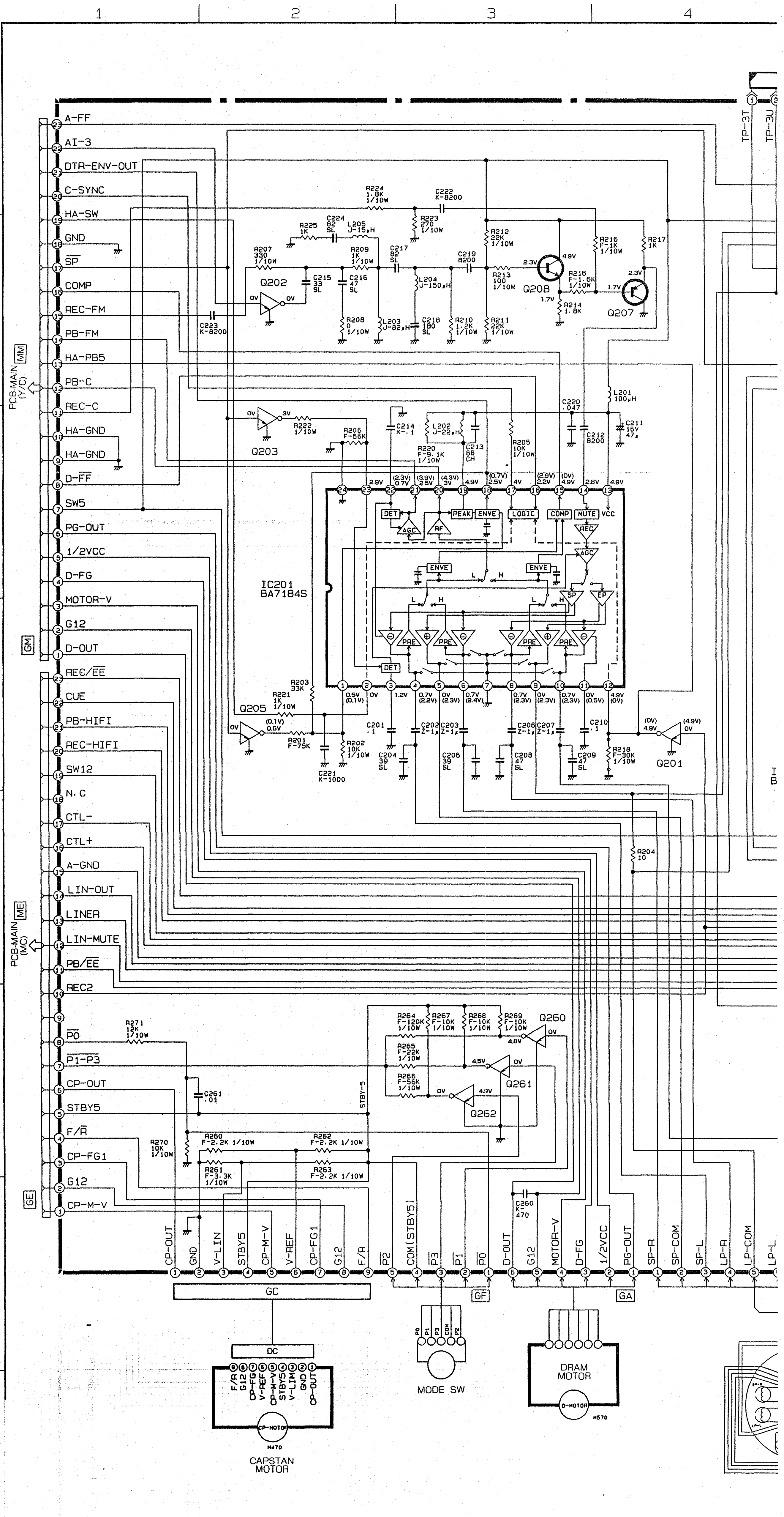

1
2
A-FF
AI-3
DTR-ENV-OUT
C-SYNC
HA-SW
GND
SP
COMP
REC-FM
PB-FM
HA-PB5
PB-C
REC-C
HA-GND
HA-GND
D-FF
SW5
PG-OUT
1/2VCC
D-FG
MOTOR-V
G12
D-OUT
PCB-MAIN (Y/C)
MM
GM
REC/EE
CUE
PB-HIFI
REC-HIFI
SW12
N.C
CTL-
CTL+
A-GND
LIN-OUT
LINER
LIN-MUTE
PB/EE
REC2
PCB-MAIN (MC)
ME
PO
P1-P3
CP-OUT
STBY5
F/R
CP-FG1
G12
CP-M-V
GE
R224 1.8K 1/10W
C222 K-8200
R223 270 1/10W
R225 1K
C224 82 SL
L205 J-15μH
R207 330 1/10W
R209 1K 1/10W
C217 82 SL
Q202
C215 33 SL
C216 47 SL
L204 J-150μH
C223 K-8200
R208 0 1/10W
L203 J-82μH
C218 180 SL
Q203
R222 1/10W
R206 F-56K
C214 K-.1
L202 J-22μH
R220 F-9.1K 1/10W
IC201 BA7184S
DET
AGC
RF
ENVE
PRE
Q205
R203 33K
R221 1K 1/10W
R201 F-75K
R202 10K 1/10W
C201 .1
C204 39 SL
C221 K-1000
C202
C203
C205 39 SL
R271 12K 1/10W
R264 F-120K 1/10W
R267 F-10K 1/10W
R265 F-22K 1/10W
R266 F-56K 1/10W
C261 .01
STBY-5
R270 10K 1/10W
R260 F-2.2K 1/10W
R262 F-2.2K 1/10W
R261 F-3.3K 1/10W
R263 F-2.2K 1/10W
CP-OUT
GND
V-LIN
STBY5
CP-M-V
V-REF
CP-FG1
G12
F/R
P2
COM(STBY5)
P3
P1
GC
DC
F/R
G12
CP-FG
V-REF
CP-M-V
STBY5
V-LIM
GND
CP-OUT
CP-MOTOR
M470
CAPSTAN MOTOR
P0
P1
P3
COM
P2
MODE SW

| 2650 | R2640 | R2623 | Q | R2614 | R2641 | D | R2624 | D2645 | D2646 | L2604 | L2603 | J2661 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-7 | d-4 | f-5 | c-9 | e-1 | f-6 | c-1 | f-5 | e-8 | d-8 | b-3 | b-3 | e-8 |
| × | × | × | ○ | × | ○ | ○ | 220<br>1/10W | ○ | ○ | × | 100μ | × |
| ○ | ○ | ○ | × | ○ | × | × | 0<br>1/10W | × | × | 100μ | × | ○ |

# ⚠PCB-CONNECTOR



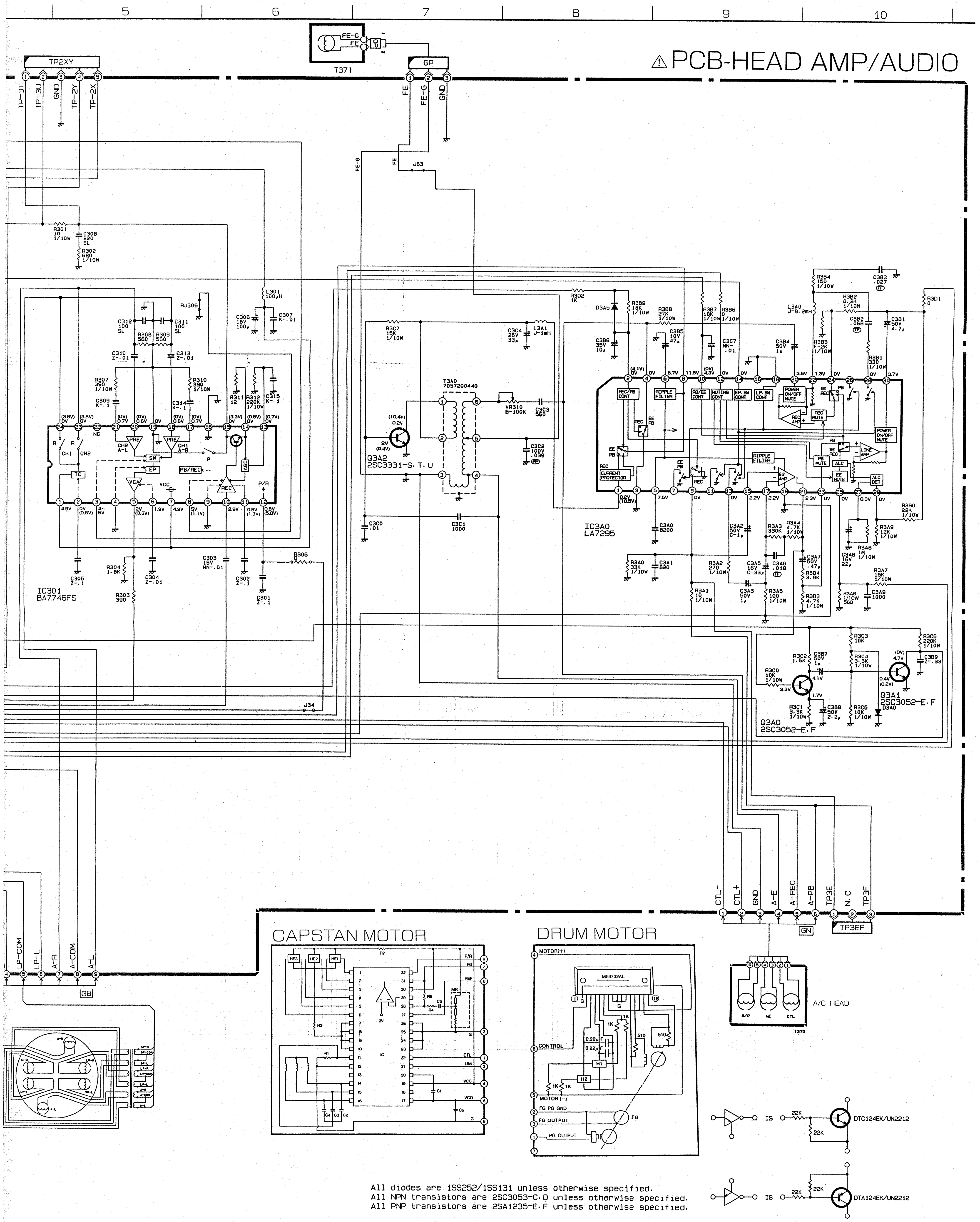
7
8
9
TU-V-OUT
SW5
TU-MONO
GND
A-IN-L
A-IN-R
GND
NF
MF
PCB-MAIN (TUNER/VIF)
A-OUT-1(L)
A-OUT-1(R)
GND
A-OUT-L
A-OUT-R
STBY5
NP
MP
PCB-MAIN (Y/C)
Q
CANAL+
STBY12/CONT12-1
SW12/CANAL+1
CONT12-2
L1/L2
EXT
IC-OUT(Y)
EE
IC-IN(Y)
GND
NJ
MJ
PCB-MAIN (Y/C)
J2666
R2603
R2601 0 1/10W
C2601 50V 1μ
BUFFER
VIDEO DRIVER
6DB AMP
V.SW2
V.SW1
CLAMP
DRIVER VCC
DRIVER GND
C2614 50V 1μ
C2613 50V 1μ
C2643 K-330
L2601 100μH
J2650
J2661
D2645
D2646
R2611 220
L2602 100μH
C2615 K-.01
R2612 1K 1/10W
R2613 220 1/10W
2601 SA1235-E,F
D2614 DA204K



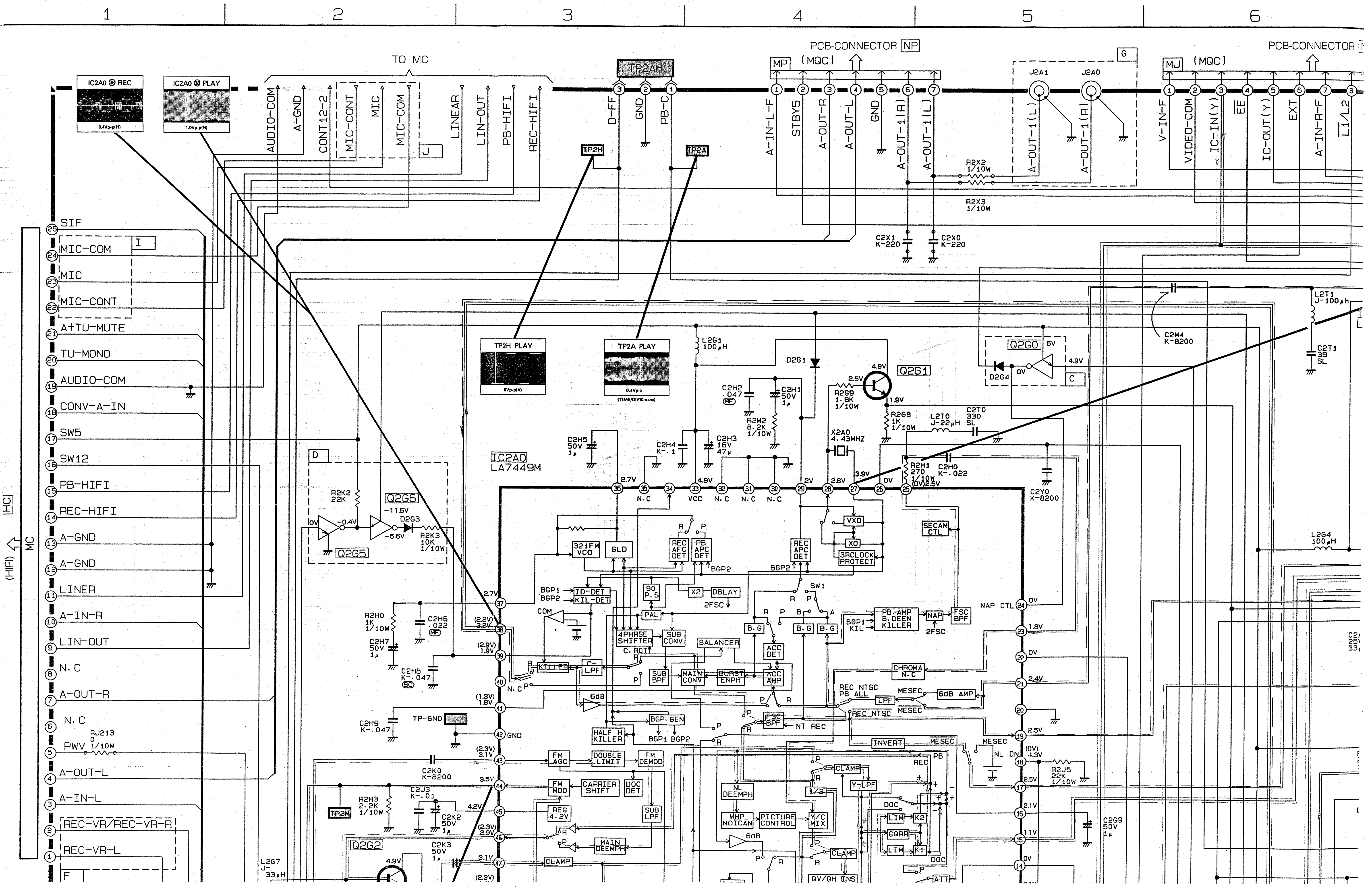
1
2
3
4
a
b
c
d
e
f
g
A-FF
AI-3
DTR-ENV-OUT
C-SYNC
HA-SW
GND
SP
COMP
REC-FM
PB-FM
HA-PB5
PB-C
REC-C
HA-GND
HA-GND
D-FF
SW5
PG-OUT
1/2VCC
D-FG
MOTOR-V
G12
D-OUT
MM
PCB-MAIN (Y/C)
GM
REC/EE
CUE
PB-HIFI
REC-HIFI
SW12
N.C
CTL-
CTL+
A-GND
LIN-OUT
LINER
LIN-MUTE
PB/EE
REC2
ME
PCB-MAIN (M/C)
P0
P1-P3
CP-OUT
STBY5
F/R
CP-FG1
G12
CP-M-V
GE
TP-3T
TP-3U
IC201 BA7184S
Q202
Q203
Q205
Q208
Q207
Q201
Q260
Q261
Q262
DET
AGC
RF
PEAK
ENVE
LOGIC
COMP
MUTE
VCC
REC
SP
EP
PRE
CP-OUT
GND
V-LIN
STBY5
CP-M-V
V-REF
CP-FG1
G12
F/R
P2
COM(STBY5)
P3
P1
P0
D-OUT
G12
MOTOR-V
D-FG
1/2VCC
PG-OUT
SP-R
SP-COM
SP-L
LP-R
LP-COM
LP-L
GC
GF
GA
DC
CAPSTAN MOTOR
MODE SW
DRAM MOTOR
M470
M570

|  | R2624 | D2645 | D2646 | L2604 | L2603 | J2661 |
|---|---|---|---|---|---|---|
|  | f-5 | e-8 | d-8 | b-3 | b-3 | e-8 |
|  | 220<br>1/10W | ○ | ○ | × | 100 μ | × |
|  | 0<br>1/10W | × | × | 100 μ | × | ○ |

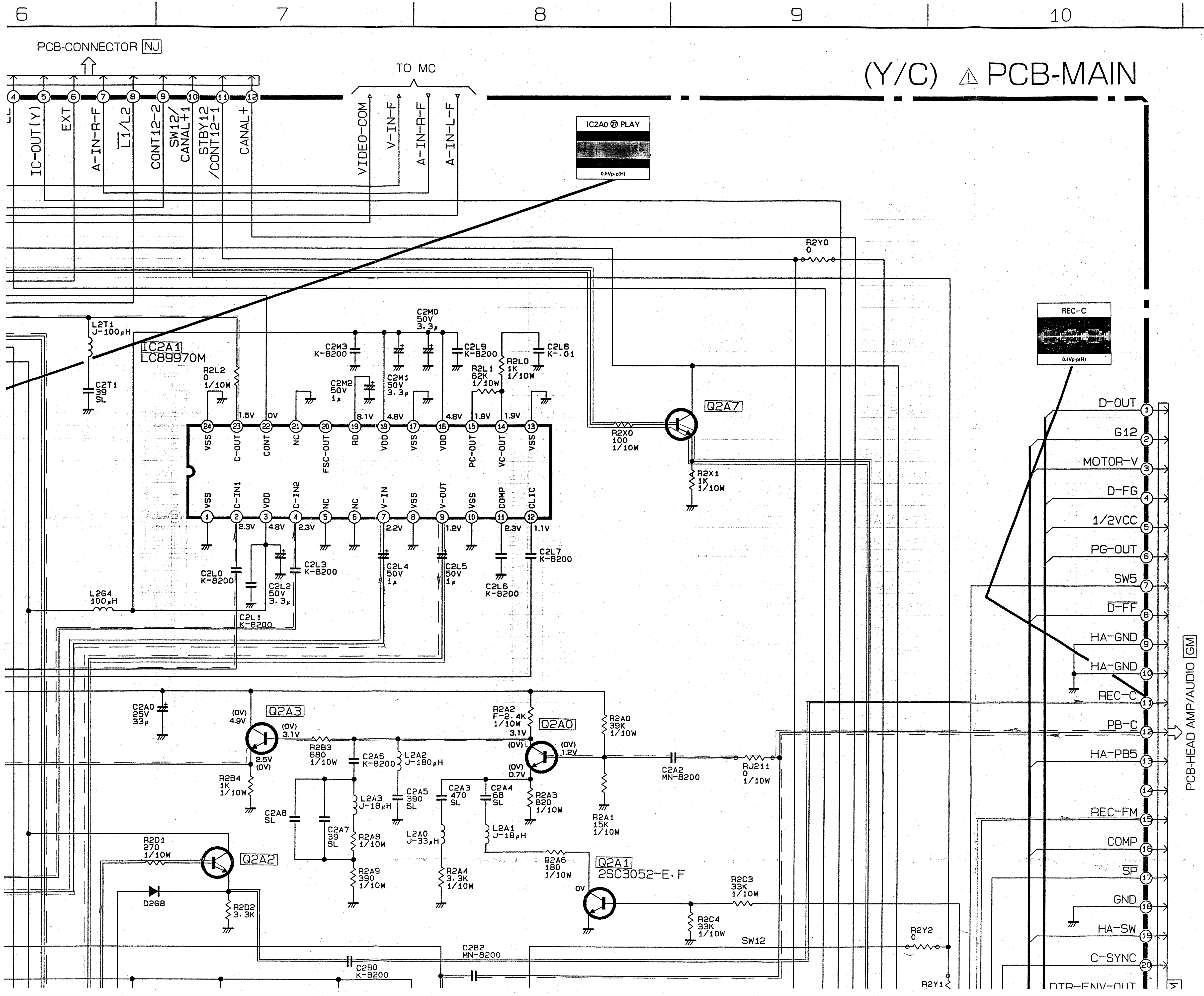
# ⚠PCB-HEAD AMP/AUDIO


5
6
7
8
9
10
TP2XY
TP-3T
TP-3U
GND
TP-2Y
TP-2X
T371
FE-G
FE
GP
J63
R301 10 1/10W
C308 220 SL
R302 680 1/10W
L301 100μH
C306 16V 100μ
C307 K-.01
RJ306
C312 100 SL
C311 100 SL
R308 560
R309 560
C310 Z-.01
C313 Z-.01
R307 390 1/10W
R310 390 1/10W
C309 K-.1
C314 K-.1
R311 12
R312 220K 1/10W
C315 K-.1
IC301 BA7746FS
R304 1.8K
R303 390
C305 Z-.1
C304 Z-.01
C303 16V MN-.01
C302 Z-.1
C301 Z-.1
R306
J34
R3C7 15K 1/10W
C3C4 25V 33μ
L3A1 J-1mH
T3A0 7057200440
VR310 B-100K
C3C3 560
C3C2 100V .039
Q3A2 2SC3331-S,T,U
C3C0 .01
C3C1 1000
R3D2 1K
D3A5
R3B9 18K 1/10W
R3B8 27K 1/10W
C3B6 35V 10μ
C3B5 10V 47μ
R3B7 18K 1/10W
R3B6 0 1/10W
C3C7 MN-.01
C3B4 50V 1μ
L3A0 J-8.2mH
R3B4 150 1/10W
C3B3 .027
R3B2 8.2K 1/10W
C3B2 .068
R3B3 F-2K 1/10W
C3B1 50V 4.7μ
R3B1 330 1/10W
R3D1 0
IC3A0 LA7295
REC/PB CONT
RIPPLE FILTER
PB/EE CONT
MUTING CONT
EP.SW CONT
LP.SW CONT
POWER ON/OFF MUTE
REC AMP
REC MUTE
CURRENT PROTECTOR
EQ AMP
LINE AMP
ALC
PB MUTE
EE MUTE
ALC DET
C3A0 8200
R3A0 33K 1/10W
C3A1 820
C3A2 50V C-1μ
R3A3 330K
R3A4 4.7K 1/10W
R3A2 270 1/10W
C3A5 16V C-33μ
C3A6 .018
C3A7 50V .47μ
R3D4 3.9K
R3A1 10 1/10W
C3A3 50V 1μ
R3A5 100 1/10W
R3D3 4.7K 1/10W
R3B0 22K 1/10W
R3A9 12K 1/10W
R3A8 1M 1/10W
C3A8 16V 22μ
R3A7 15K 1/10W
R3A6 1/10W 560
C3A9 1000
R3C3 10K
R3C6 220K 1/10W
R3C2 1.5K
C3B7 50V 1μ
R3C4 3.3K 1/10W
C3B9 Z-.33
R3C0 10K 1/10W
Q3A1 2SC3052-E,F
D3A0
R3C1 3.3K 1/10W
C3B8 50V 2.2μ
R3C5 10K 1/10W
Q3A0 2SC3052-E,F
CTL-
CTL+
GND
A-E
A-REC
A-PB
TP3E
N.C
TP3F
GN
TP3EF
A/C HEAD
T370
LP-COM
LP-L
A-R
A-COM
A-L
GB
CAPSTAN MOTOR
HE3
HE2
HE1
F/R
FG
REF
G
CTL
LIM
VCC
VCO
IC
MR
DRUM MOTOR
MOTOR(+)
M56732AL
CONTROL
MOTOR(-)
FG PG GND
FG OUTPUT
PG OUTPUT
IS
22K
DTC124EK/UN2212
DTA124EK/UN2212

All diodes are 1SS252/1SS131 unless otherwise specified.
All NPN transistors are 2SC3053-C,D unless otherwise specified.
All PNP transistors are 2SA1235-E,F unless otherwise specified.


1
2
3
4
5
6
TO MC
IC2A0 ⓢ REC
0.4Vp-p(H)
IC2A0 ⓢ PLAY
1.0Vp-p(H)
AUDIO-COM
A-GND
CONT12-2
MIC-CONT
MIC
MIC-COM
J
LINEAR
LIN-OUT
PB-HIFI
REC-HIFI
TP2AH
D-FF
GND
PB-C
TP2H
TP2A
PCB-CONNECTOR NP
MP
(MQC)
A-IN-L-F
STBY5
A-OUT-R
A-OUT-L
GND
A-OUT-1(R)
A-OUT-1(L)
G
J2A1
J2A0
A-OUT-1(L)
A-OUT-1(R)
R2X2 1/10W
R2X3 1/10W
C2X1 K-220
C2X0 K-220
PCB-CONNECTOR N
MJ
(MQC)
V-IN-F
VIDEO-COM
IC-IN(Y)
EE
IC-OUT(Y)
EXT
A-IN-R-F
L1/L2
(HIFI)
MC
HC
SIF
I
MIC-COM
MIC
MIC-CONT
A+TU-MUTE
TU-MONO
AUDIO-COM
CONV-A-IN
SW5
SW12
PB-HIFI
REC-HIFI
A-GND
A-GND
LINER
A-IN-R
LIN-OUT
N.C
A-OUT-R
N.C
RJ213 0 1/10W
PWV
A-OUT-L
A-IN-L
REC-VR/REC-VR-R
REC-VR-L
F
D
R2K2 22K
Q2G6
-11.5V
D2G3
0V
-0.4V
-5.6V
R2K3 10K 1/10W
Q2G5
TP2H PLAY
5Vp-p(V)
TP2A PLAY
0.4Vp-p
(TIME/DIV10msec)
L2G1 100μH
D2G1
4.9V
Q2G1
2.5V
R2G9 1.8K 1/10W
1.9V
R2G8 1K 1/10W
L2T0 J-22μH
C2T0 330 SL
C2H2 .047 MF
C2H1 50V 1μ
R2H2 8.2K 1/10W
X2A0 4.43MHZ
C2H5 50V 1μ
C2H4 K-.1
C2H3 16V 47μ
R2H1 270 1/10W
C2H0 K-.022
C2Y0 K-8200
Q2G0
5V
4.9V
D2G4
0V
C
C2M4 K-8200
L2T1 J-100μH
C2T1 39 SL
IC2A0
LA7449M
2.7V
N.C
VCC
4.9V
N.C
N.C
N.C
2V
2.6V
3.9V
0V
(0V)2.5V
321FM VCO
SLD
REC AFC DET
PB APC DET
R P
REC APC DET
VXO
XO
3RCLOCK PROTECT
SECAM CTL
BGP2
BGP2
SW1
BGP1
BGP2
ID-DET
KIL-DET
90 P.S
X2
DBLAY
2FSC
PAL
COM
4PHASE SHIFTER
SUB CONV
C.ROT
BALANCER
B.G
B.G
B.G
ACC DET
BGP1 KIL
PB-AMP B.DEEN KILLER
NAP
FSC BPF
2FSC
NAP CTL
KILLER
C-LPF
SUB BPF
MAIN CONV
BURST ENPH
ACC AMP
CHROMA N.C
6dB
REC NTSC PB ALL
LPF
MESEC
6dB AMP
REC NTSC
MESEC
FSC BPF
NT REC
BGP.GEN
HALF H KILLER
BGP1 BGP2
INVERT
MESEC
MESEC
NL ON
FM AGC
DOUBLE LIMIT
FM DEMOD
CLAMP
REC
PB
FM MOD
CARRIER SHIFT
DOC DET
NL DEEMPH
1/2
Y-LPF
REG 4.2V
SUB LPF
WHP NOICAN
PICTURE CONTROL
Y/C MIX
DOC
LIM
K2
CORR
LIM
K1
MAIN DEEMPH
6dB
CLAMP
CLAMP
DOC
QV/QH INS
ATT
R2H0 1K 1/10W
C2H6 .022 MF
C2H7 50V 1μ
C2H8 K-.047 SC
(2.2V) 3.2V
(2.9V) 1.9V
(1.3V) 1.8V
2.7V
C2H9 K-.047
TP-GND
GND
(2.3V) 3.1V
C2K0 K-8200
3.5V
TP2M
R2H3 2.2K 1/10W
C2J3 K-.01
4.2V
C2K2 50V 1μ
(2.3V) 2.9V
Q2G2
4.9V
C2K3 50V 1μ
3.1V
(2.3V)
L2G7 J-33μH
0V
1.8V
0V
2.4V
2.5V
(0V) 4.3V
R2J5 22K 1/10W
2.5V
2.1V
1.1V
0V
C2G9 50V 1μ
L2G4 100μH
N.C
P
R

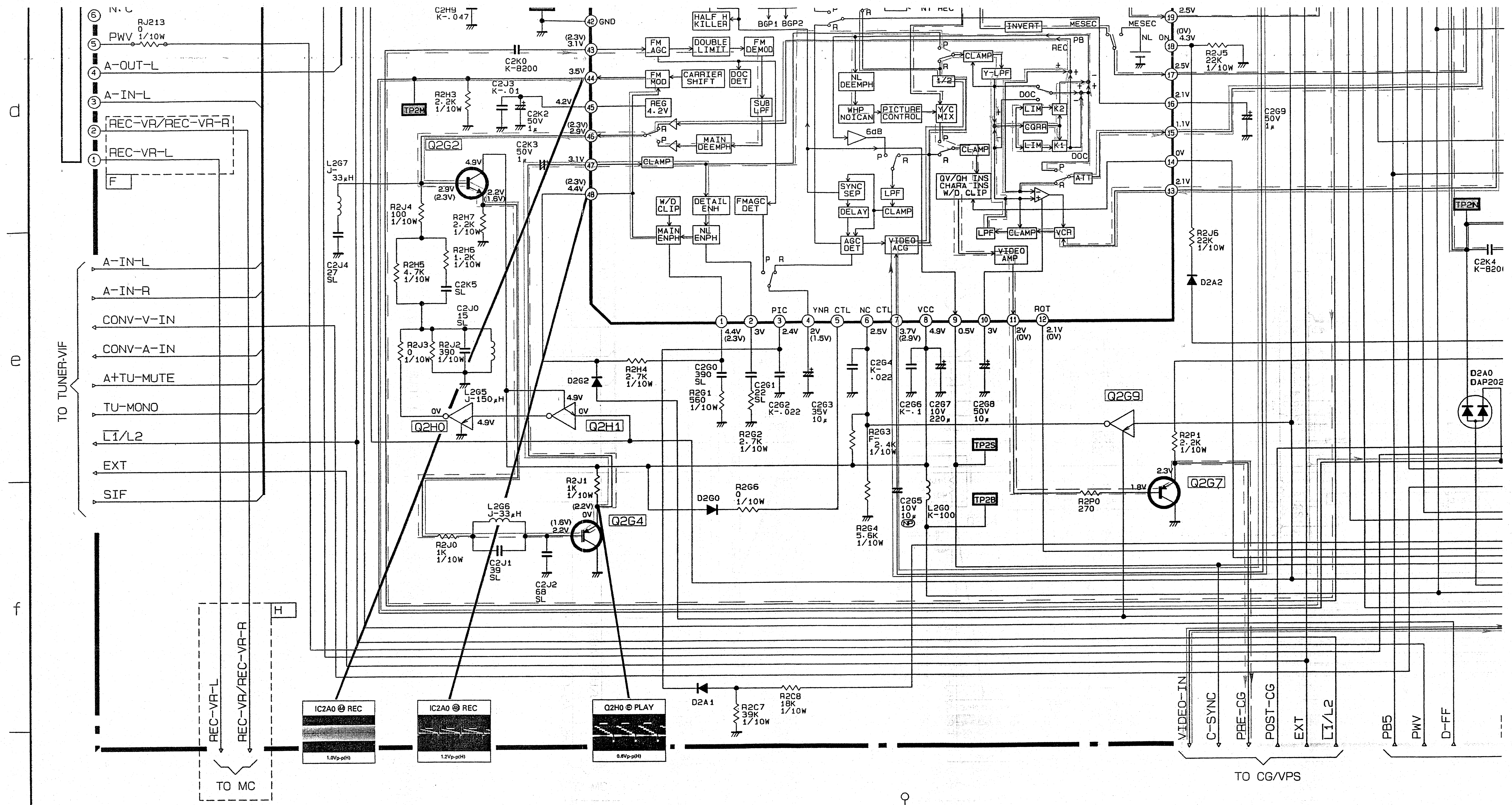
# (Y/C) ⚠ PCB-MAIN


6
7
8
9
10
11
PCB-CONNECTOR NJ
TO MC
4
5
6
7
8
9
10
11
12
IC-OUT(Y)
EXT
A-IN-R-F
L1/L2
CONT12-2
SW12/CANAL+1
STBY12/CONT12-1
CANAL+
VIDEO-COM
V-IN-F
A-IN-R-F
A-IN-L-F
IC2A0 ㉗ PLAY
0.5Vp-p(H)
REC-C
0.4Vp-p(H)
R2Y0 0
L2T1 J-100μH
C2T1 39 SL
IC2A1
LC89970M
R2L2 0 1/10W
C2M0 50V 3.3μ
C2M3 K-8200
C2L9 K-8200
C2L8 K-.01
R2L0 1K 1/10W
C2M2 50V 1μ
C2M1 50V 3.3μ
R2L1 82K 1/10W
1.5V
0V
8.1V
4.8V
4.8V
1.9V
1.9V
VSS
C-OUT
CONT
NC
FSC-OUT
RD
VDD
VSS
VDD
PC-OUT
VC-OUT
VSS
VSS
C-IN1
VDD
C-IN2
NC
NC
V-IN
VSS
V-OUT
VSS
COMP
CLIC
2.3V
4.8V
2.3V
2.2V
1.2V
2.3V
1.1V
C2L0 K-8200
C2L2 50V 3.3μ
C2L3 K-8200
C2L4 50V 1μ
C2L5 50V 1μ
C2L6 K-8200
C2L7 K-8200
C2L1 K-8200
L2G4 100μH
Q2A7
R2X0 100 1/10W
R2X1 1K 1/10W
C2A0 25V 33μ
Q2A3
(0V) 4.9V
(0V) 3.1V
2.5V (0V)
R2B3 680 1/10W
R2B4 1K 1/10W
C2A6 K-8200
L2A2 J-180μH
R2A2 F-2.4K 1/10W
3.1V
Q2A0
(0V) 1.2V
(0V) 0.7V
R2A0 39K 1/10W
C2A2 MN-8200
RJ211 0 1/10W
C2A8 SL
L2A3 J-18μH
C2A5 390 SL
C2A3 470 SL
C2A4 68 SL
R2A3 820 1/10W
R2A1 15K 1/10W
C2A7 39 SL
R2A8 1/10W
L2A0 J-33μH
L2A1 J-18μH
R2A9 390 1/10W
R2A4 3.3K 1/10W
R2A6 180 1/10W
Q2A1
2SC3052-E,F
0V
R2D1 270 1/10W
Q2A2
D2G8
R2D2 3.3K
R2C3 33K 1/10W
R2C4 33K 1/10W
SW12
R2Y2 0
R2Y1
C2B0 K-8200
C2B2 MN-8200
D-OUT
G12
MOTOR-V
D-FG
1/2VCC
PG-OUT
SW5
D-FF
HA-GND
HA-GND
REC-C
PB-C
HA-PB5
REC-FM
COMP
SP
GND
HA-SW
C-SYNC
DTR-ENV-OUT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
PCB-HEAD AMP/AUDIO GM

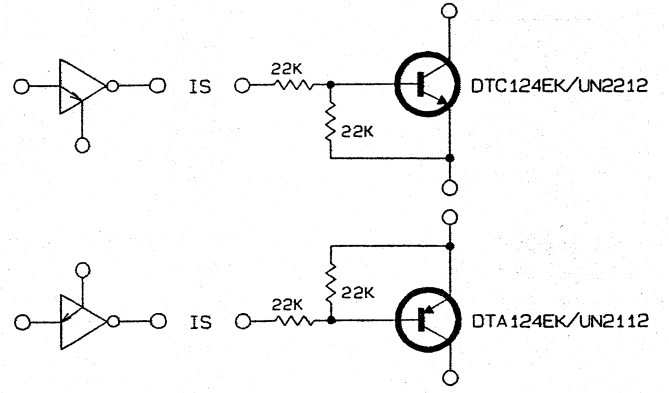
○ : Employed ╳ : Not Employed

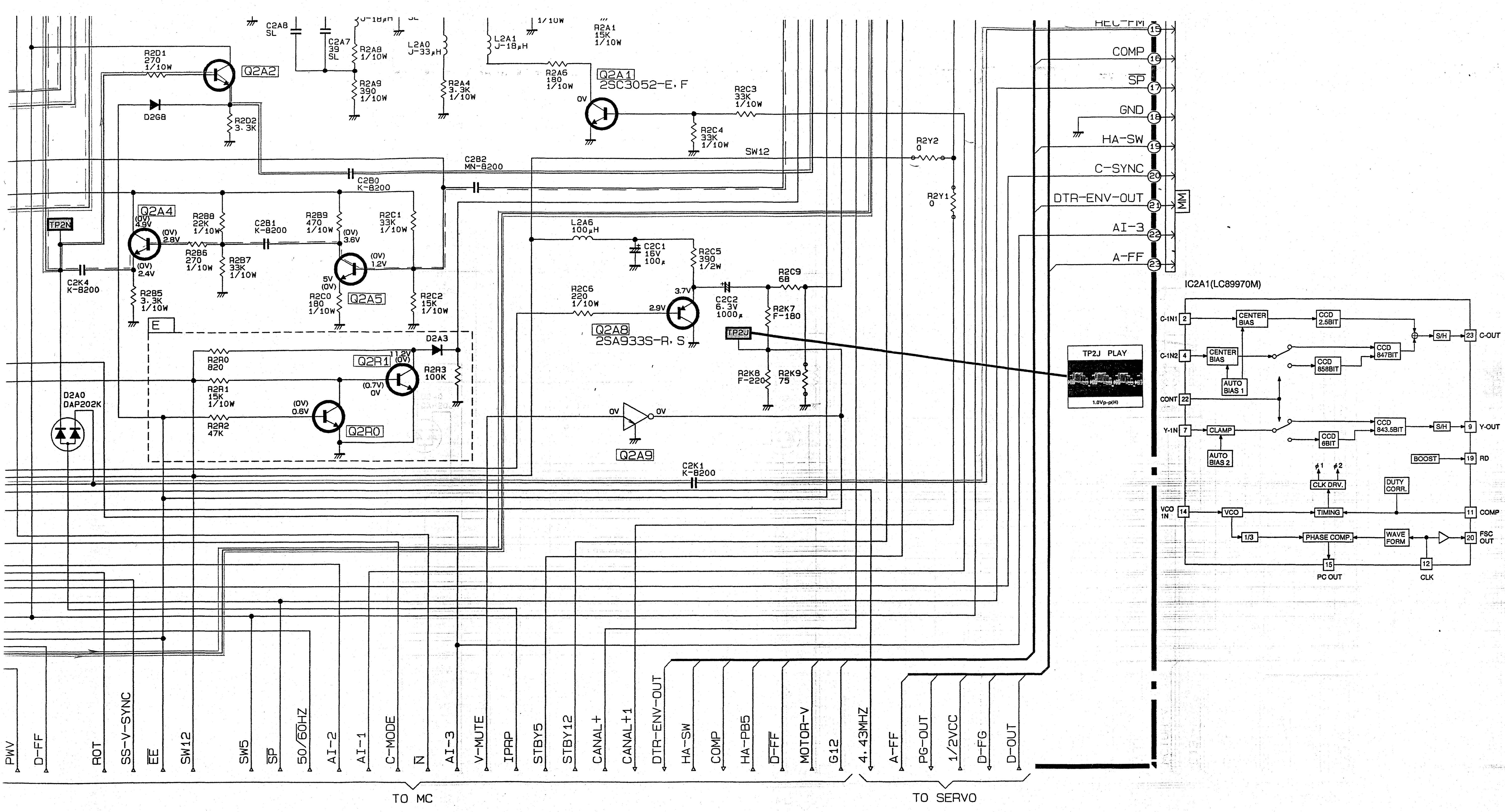
| | Y | B | E | IR | G | A | NZ |
|---|---|---|---|---|---|---|---|
| C (b-4) | ○ | ╳ | ○ | ○ | ○ | ○ | ○ |
| D (c-2) | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ |
| E (e-7) | ╳ | ○ | ╳ | ○ | ╳ | ╳ | ╳ |
| F (d-1) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ |
| G (a-5) | ○ | ○ | ○ | ○ | ○ | ╳ | ╳ |
| H (f-1) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ |
| I (b-1) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ |
| J (a-2) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ |
| R2X2(a-5) | 1K | ← | ← | ← | ← | ╳ | ╳ |
| R2X3(a-5) | 1K | ← | ← | ← | ← | ╳ | ╳ |
| C2X0(a-5) | ○ | ○ | ○ | ○ | ○ | ╳ | ╳ |
| C2X1(a-5) | ○ | ○ | ○ | ○ | ○ | ╳ | ╳ |
| C2A8(d-7) | 33 | 18 | 33 | 18 | 33 | ← | ← |
| C2K5(e-2) | 180 | 220 | 180 | 220 | 180 | ← | ← |
| R2A8(d-7) | 330 | 300-F | 330 | 300-F | 330 | ← | ← |
| R2A9(d-7) | 220 | 390 | 220 | 390 | 220 | ← | ← |
| RJ213(d-1) | ╳ | ○ | ○ | ○ | ╳ | ╳ | ○ |
| R2Y0(b-9) | ○ | ╳ | ○ | ╳ | ○ | ╳ | ╳ |
| R2Y1(d-9) | ○ | ╳ | ○ | ╳ | ○ | ╳ | ╳ |
| R2Y2(d-9) | ╳ | ○ | ╳ | ○ | ╳ | ○ | ○ |
| R2K9(e-9) | ○ | ╳ | ○ | ╳ | ○ | ╳ | ╳ |

(B) : Means HS-551V(B) and HS-550V(B)


d
e
f
g
N.C
PWV
A-OUT-L
A-IN-L
REC-VR/REC-VR-R
REC-VR-L
RJ213 0 1/10W
F
TO TUNER-VIF
A-IN-L
A-IN-R
CONV-V-IN
CONV-A-IN
A+TU-MUTE
TU-MONO
L1/L2
EXT
SIF
H
REC-VR-L
REC-VR/REC-VR-R
TO MC
C2H9 K-.047
GND
FM AGC
DOUBLE LIMIT
FM DEMOD
HALF H KILLER
BGP1 BGP2
FM MOD
CARRIER SHIFT
DOC DET
REG 4.2V
SUB LPF
MAIN DEEMPH
CLAMP
W/D CLIP
DETAIL ENH
FMAGC DET
MAIN ENPH
NL ENPH
NL DEEMPH
WHP NOICAN
PICTURE CONTROL
Y/C MIX
6dB
SYNC SEP
DELAY
LPF
CLAMP
AGC DET
VIDEO ACG
INVERT
MESEC
NL ON
PB
REC
Y-LPF
1/2
DOC
LIM
K2
CQRR
K1
ATT
QV/QH INS CHARA INS W/D CLIP
LPF
VCR
VIDEO AMP
PIC
YNR CTL
NC CTL
VCC
ROT
TP2M
TP2S
TP2B
TP2N
Q2G2
Q2H0
Q2H1
Q2G4
Q2G9
Q2G7
C2K0 K-8200
C2J3 K-.01
R2H3 2.2K 1/10W
C2K2 50V 1μ
C2K3 50V 1μ
L2G7 J-33μH
C2J4 27 SL
R2J4 100 1/10W
R2H7 2.2K 1/10W
R2H6 1.2K 1/10W
R2H5 4.7K 1/10W
C2K5 SL
C2J0 15 SL
R2J3 0 1/10W
R2J2 390 1/10W
L2G5 J-150μH
D2G2
R2H4 2.7K 1/10W
C2G0 390 SL
R2G1 560 1/10W
C2G1 22 SL
C2G2 K-.022
C2G3 35V 10μ
R2G2 2.7K 1/10W
C2G4 K-.022
C2G6 K-.1
C2G7 10V 220μ
C2G8 50V 10μ
R2G3 F-2.4K 1/10W
R2G4 5.6K 1/10W
C2G5 10V 10μ NP
L2G0 K-100
R2J1 1K 1/10W
L2G6 J-33μH
R2J0 1K 1/10W
C2J1 39 SL
C2J2 68 SL
D2G0
R2G6 0 1/10W
D2A1
R2C7 39K 1/10W
R2C8 18K 1/10W
R2J5 22K 1/10W
C2G9 50V 1μ
R2J6 22K 1/10W
D2A2
C2K4 K-820
D2A0 DAP202
R2P1 2.2K 1/10W
R2P0 270
VIDEO-IN
C-SYNC
PRE-CG
POST-CG
EXT
L1/L2
PB5
PWV
D-FF
TO CG/VPS
IC2A0 ㊹ REC
1.0Vp-p(H)
IC2A0 ㊽ REC
1.2Vp-p(H)
Q2H0 Ⓔ PLAY
0.6Vp-p(H)

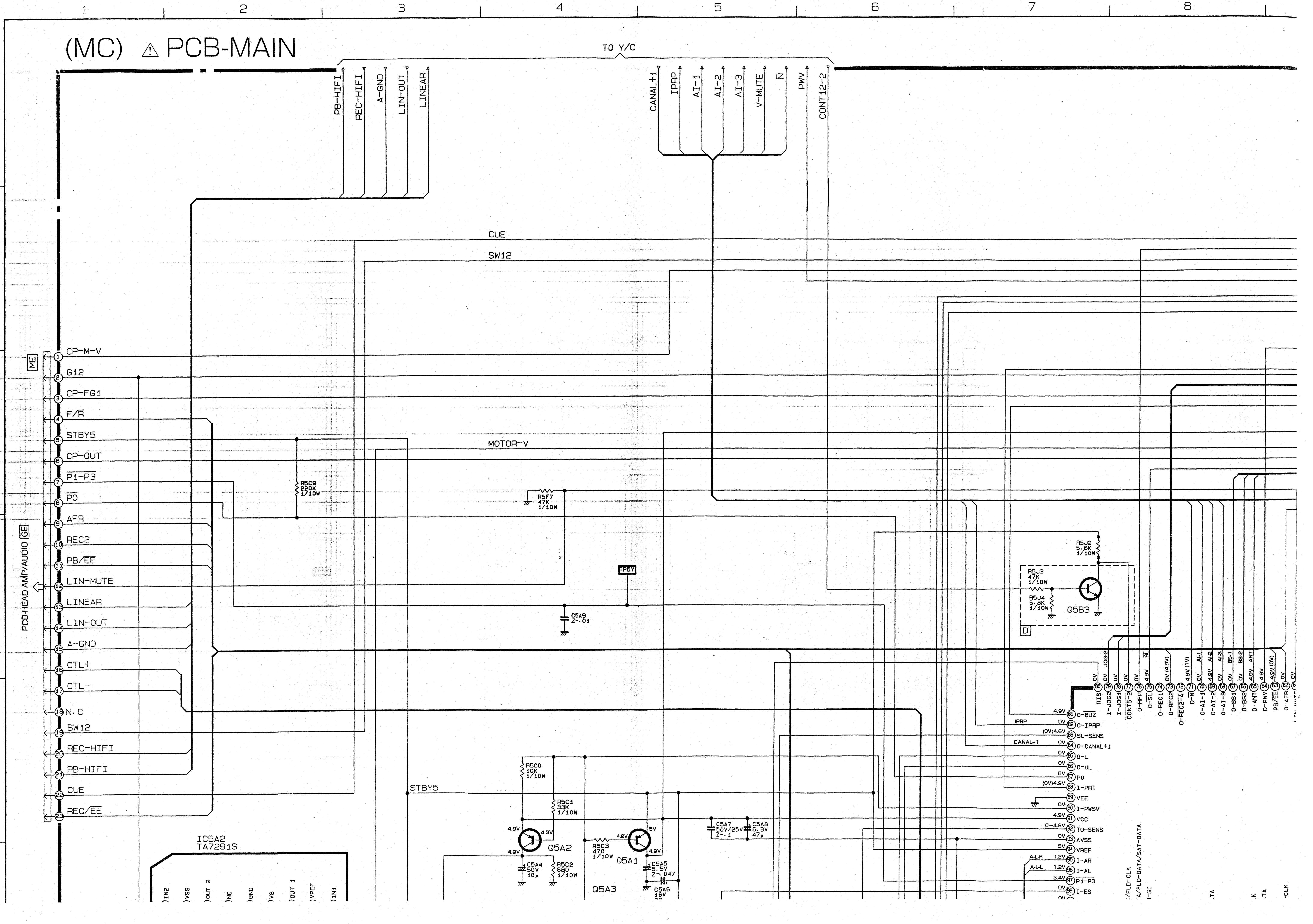
All diodes are 1SS252/1SS1310M unless otherwise specified.
All NPN transistors are 2SC3053-C,D unless otherwise specified.
All PNP transistors are 2SA1235-E,F unless otherwise specified.


IS
22K
22K
DTC124EK/UN2212
IS
22K
22K
DTA124EK/UN2112

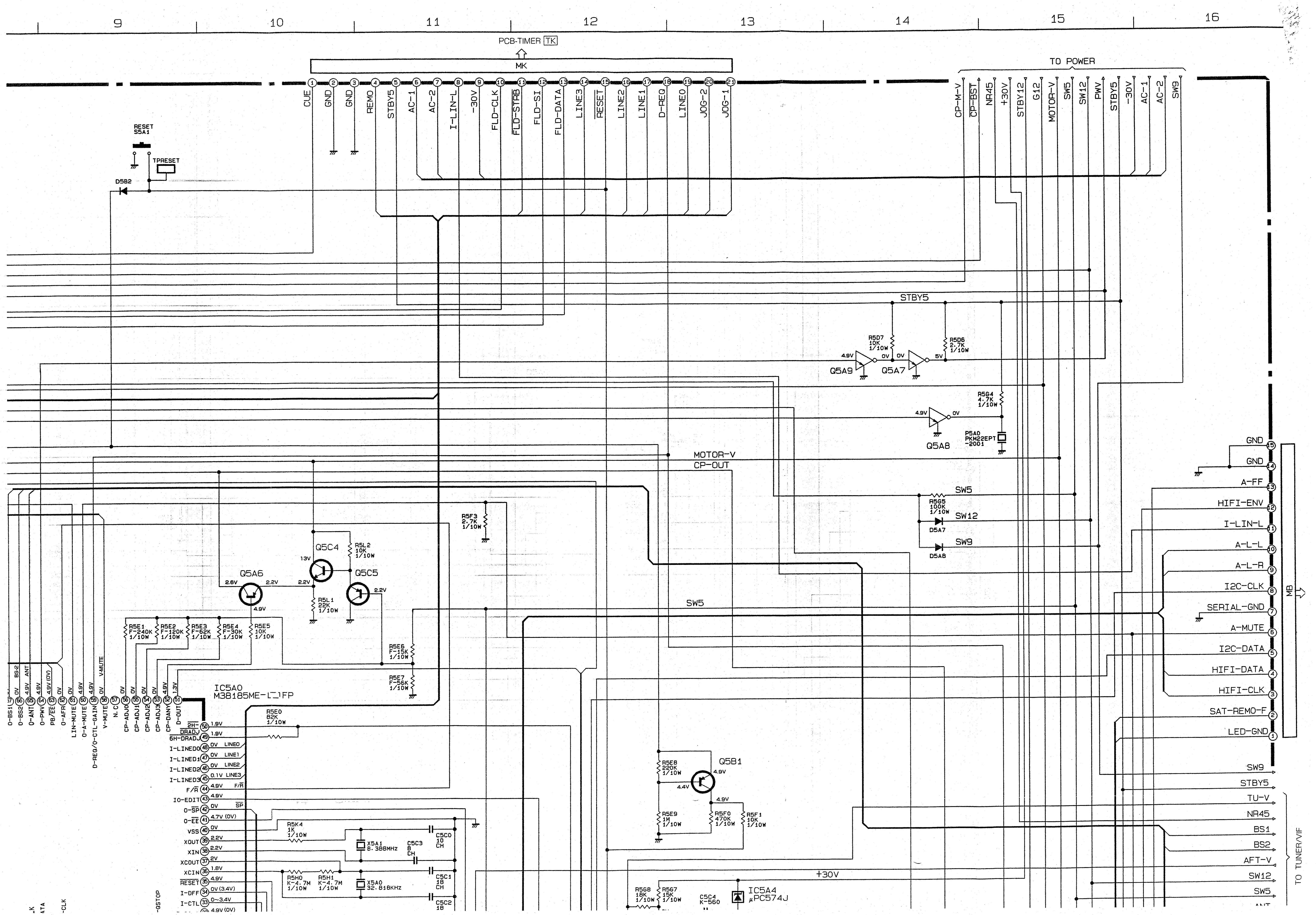

C2A8
SL
C2A7
39
SL
R2A8
1/10W
R2A9
390
1/10W
L2A0
J-33μH
R2A4
3.3K
1/10W
L2A1
J-18μH
R2A6
180
1/10W
R2A1
15K
1/10W
Q2A1
2SC3052-E, F
0V
R2C3
33K
1/10W
R2C4
33K
1/10W
SW12
R2D1
270
1/10W
Q2A2
D2G8
R2D2
3.3K
C2B2
MN-8200
C2B0
K-8200
R2Y2
0
R2Y1
0
Q2A4
TP2N
(0V)
4.9V
(0V)
2.8V
(0V)
2.4V
R2B8
22K
1/10W
R2B6
270
1/10W
R2B7
33K
1/10W
C2B1
K-8200
R2B9
470
1/10W
(0V)
3.6V
R2C1
33K
1/10W
(0V)
1.2V
5V
(0V)
R2C0
180
1/10W
Q2A5
R2C2
15K
1/10W
C2K4
K-8200
R2B5
3.3K
1/10W
E
L2A6
100μH
C2C1
16V
100μ
R2C5
390
1/2W
R2C6
220
1/10W
3.7V
2.9V
Q2A8
2SA933S-R, S
C2C2
6.3V
1000μ
R2C9
68
R2K7
F-180
TP2J
R2K8
F-220
R2K9
75
D2A3
11.2V
(0V)
Q2R1
R2R0
820
R2R1
15K
1/10W
(0.7V)
0V
R2R3
100K
(0V)
0.6V
Q2R0
R2R2
47K
D2A0
DAP202K
0V
0V
Q2A9
C2K1
K-8200
REC-FM 15
COMP 16
SP 17
GND 18
HA-SW 19
C-SYNC 20
DTR-ENV-OUT 21
AI-3 22
A-FF 23
MM
TP2J PLAY
1.0Vp-p(H)
IC2A1(LC89970M)
C-IN1 2
C-IN2 4
CONT 22
Y-IN 7
VCO IN 14
CENTER BIAS
CENTER BIAS
AUTO BIAS 1
CCD 2.5BIT
CCD 847BIT
CCD 858BIT
S/H
23 C-OUT
CLAMP
AUTO BIAS 2
CCD 843.5BIT
CCD 6BIT
S/H
9 Y-OUT
BOOST
19 RD
φ1
φ2
CLK DRV.
DUTY CORR.
VCO
TIMING
11 COMP
1/3
PHASE COMP.
WAVE FORM
20 FSC OUT
15
PC OUT
12
CLK
PWV
D-FF
ROT
SS-V-SYNC
EE
SW12
SW5
SP
50/60HZ
AI-2
AI-1
C-MODE
N
AI-3
V-MUTE
IPRP
STBY5
STBY12
CANAL+
CANAL+1
DTR-ENV-OUT
HA-SW
COMP
HA-PB5
D-FF
MOTOR-V
G12
4.43MHZ
A-FF
PG-OUT
1/2VCC
D-FG
D-OUT
TO MC
TO SERVO

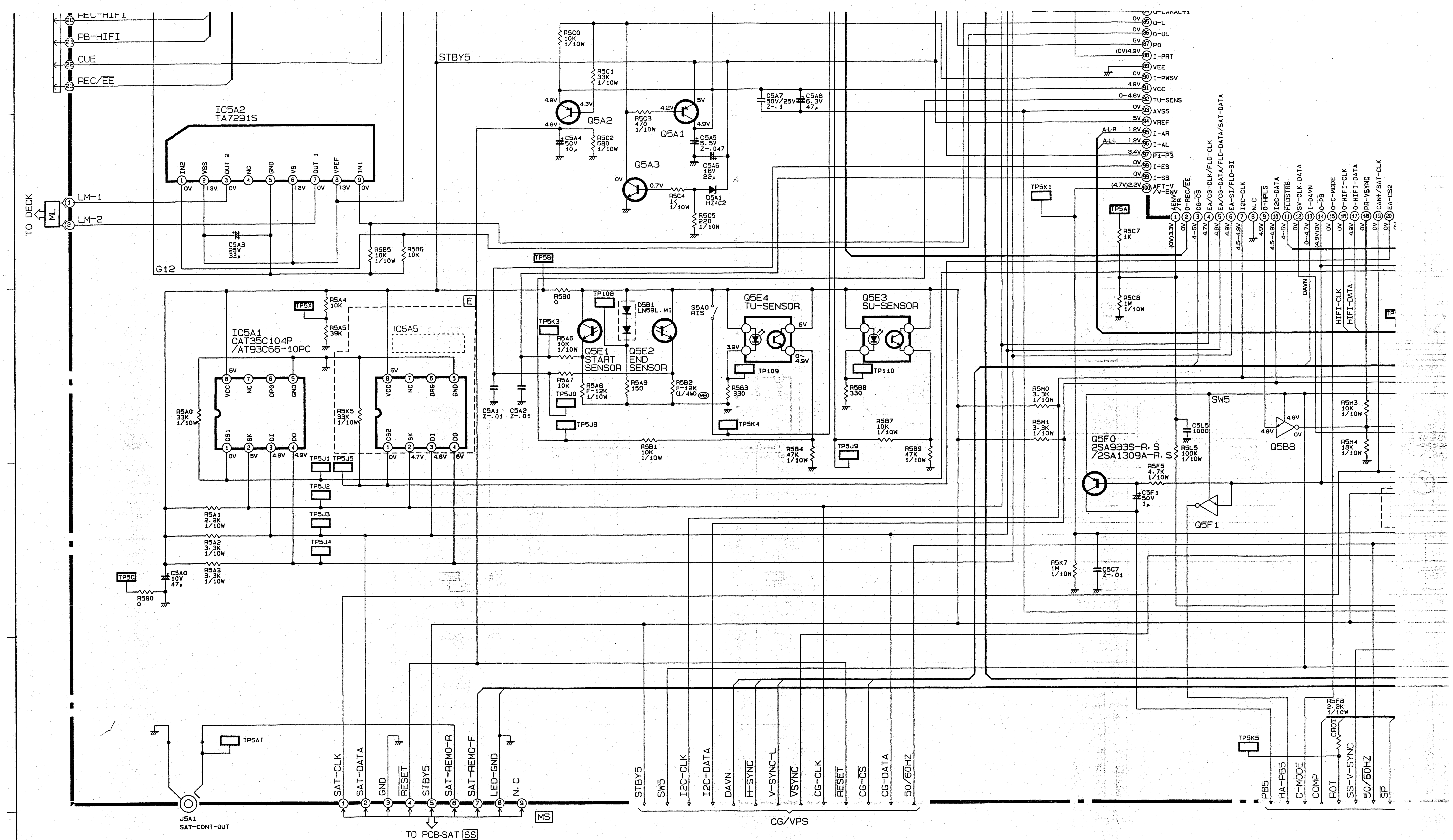
———————— Recording of Luminance Signal
– – – – – – – Playback of Luminance Signal
════════ Recording of Color Signal
— — — — — Playback of Color Signal

# (MC) ⚠ PCB-MAIN



1
2
3
4
5
6
7
8
TO Y/C
PB-HIFI
REC-HIFI
A-GND
LIN-OUT
LINEAR
CANAL+1
IPRP
AI-1
AI-2
AI-3
V-MUTE
N̄
PWV
CONT12-2
CUE
SW12
MOTOR-V
ME
GE
PCB-HEAD AMP/AUDIO
① CP-M-V
② G12
③ CP-FG1
④ F/R̄
⑤ STBY5
⑥ CP-OUT
⑦ P̄1̄-̄P̄3̄
⑧ P̄Ō
⑨ AFR
⑩ REC2
⑪ PB/ĒĒ
⑫ LIN-MUTE
⑬ LINEAR
⑭ LIN-OUT
⑮ A-GND
⑯ CTL+
⑰ CTL-
⑱ N.C
⑲ SW12
⑳ REC-HIFI
㉑ PB-HIFI
㉒ CUE
㉓ REC/ĒĒ
R5C9
220K
1/10W
R5F7
47K
1/10W
TP5Y
C5A9
Z-.01
R5J2
5.6K
1/10W
R5J3
47K
1/10W
R5J4
6.8K
1/10W
Q5B3
D
STBY5
R5C0
10K
1/10W
R5C1
33K
1/10W
4.9V
4.3V
4.9V
Q5A2
C5A4
50V
10μ
R5C2
680
1/10W
R5C3
470
1/10W
4.2V
5V
4.9V
Q5A1
Q5A3
C5A5
5.5V
Z-.047
C5A6
16V
C5A7
50V/25V
Z-.1
C5A8
6.3V
47μ
IC5A2
TA7291S
IN2
VSS
OUT 2
NC
GND
VS
OUT 1
VREF
IN1
JOG-2
S̄L̄
AI-1
AI-2
AI-3
BS-1
BS-2
ANT
0V ⑧⓪ RIS
0V ⑦⑨ I-JOG2
0V ⑦⑧ I-JOG1
0V ⑦⑦ C̄ŌN̄T̄5̄-̄2̄
0V ⑦⑥ O-HFR
4.9V ⑦⑤ O-S̄L̄
⑦④ O-REC1
0V (4.9V) ⑦③ O-REC2
⑦② O-R̄ĒC̄2̄-A
4.9V (1V) ⑦① O-N̄
0V ⑦⓪ O-AI-1
4.9V ⑥⑨ O-AI-2
0V ⑥⑧ O-AI-3
0V ⑥⑦ O-BS1
0V ⑥⑥ O-BS2
4.9V ⑥⑤ O-ANT
4.9V ⑥④ O-PWV
4.9V (0V) ⑥③ PB/ĒĒ
0V ⑥② O-AFR
0V
4.9V ⑧① O-B̄ŪZ̄
IPRP 0V ⑧② O-IPRP
(0V)4.6V ⑧③ SU-SENS
CANAL+1 0V ⑧④ O-CANAL+1
0V ⑧⑤ O-L
0V ⑧⑥ O-UL
5V ⑧⑦ PO
(0V)4.9V ⑧⑧ I-PRT
⑧⑨ VEE
0V ⑨⓪ I-PWSV
4.9V ⑨① VCC
0~4.8V ⑨② TU-SENS
0V ⑨③ AVSS
5V ⑨④ VREF
A-L-R 1.2V ⑨⑤ I-AR
A-L-L 1.2V ⑨⑥ I-AL
3.4V ⑨⑦ P̄1̄-̄P̄3̄
0V ⑨⑧ I-ES
0V
/FLD-CLK
A/FLD-DATA/SAT-DATA
I-SI
TA
K
TA
-CLK

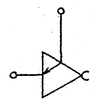

9
10
11
12
13
14
15
16
PCB-TIMER TK
MK
CUE
GND
GND
REMO
STBY5
AC-1
AC-2
I-LIN-L
-30V
FLD-CLK
FLD-STRB
FLD-SI
FLD-DATA
LINE3
RESET
LINE2
LINE1
D-REQ
LINE0
JOG-2
JOG-1
TO POWER
CP-M-V
CP-BST
NR45
+30V
STBY12
G12
MOTOR-V
SW5
SW12
PWV
STBY5
-30V
AC-1
AC-2
SW9
RESET S5A1
TPRESET
D5B2
STBY5
R5D7 10K 1/10W
R5D6 2.7K 1/10W
4.9V
0V
0V
5V
Q5A9
Q5A7
R5G4 4.7K 1/10W
4.9V
0V
Q5A8
P5A0 PKM22EPT -2001
MOTOR-V
CP-OUT
SW5
R5G5 100K 1/10W
SW12
D5A7
SW9
D5A8
R5F3 2.7K 1/10W
Q5C4
13V
R5L2 10K 1/10W
Q5C5
2.2V
2.2V
Q5A6
2.6V
2.2V
4.9V
R5L1 22K 1/10W
R5E1 F-240K 1/10W
R5E2 F-120K 1/10W
R5E3 F-62K 1/10W
R5E4 F-30K 1/10W
R5E5 10K 1/10W
R5E6 F-15K 1/10W
R5E7 F-56K 1/10W
SW5
IC5A0
M38185ME-□□FP
O-BS1
O-BS2
O-ANT
O-PWV
PB/EE
O-AFR
LIN-MUTE
O-A-MUTE
D-REQ/O-CTL-GAIN
V-MUTE
N.C
CP-ADJ0
CP-ADJ1
CP-ADJ2
CP-ADJ3
CP-DANY
D-OUT
BS-2
ANT
4.9V (0V)
V-MUTE
2H-DRADJ
6H-DRADJ
I-LINED0
I-LINED1
I-LINED2
I-LINED3
F/R
IO-EDIT
O-SP
O-EE
VSS
XOUT
XIN
XCOUT
XCIN
RESET
I-DFF
I-CTL
1.9V
1.9V
0V LINE0
0V LINE1
0V LINE2
0.1V LINE3
4.9V F/R
4.9V
0V SP
4.7V (0V)
0V
2.2V
2.2V
2V
1.8V
4.9V
0V (3.4V)
0~3.4V
4.9V (0V)
R5E0 82K 1/10W
R5K4 1K 1/10W
X5A1 8.388MHZ
C5C3 8 CH
C5C0 10 CH
R5H0 K-4.7M 1/10W
R5H1 K-4.7M 1/10W
X5A0 32.818KHZ
C5C1 18 CH
C5C2 18
Q5B1
R5E8 220K 1/10W
4.9V
4.4V
4.9V
R5E9 1M 1/10W
R5F0 470K 1/10W
R5F1 10K 1/10W
+30V
R5G8 18K 1/10W
R5G7 15K 1/10W
C5C4 K-560
IC5A4 μPC574J
GND
GND
A-FF
HIFI-ENV
I-LIN-L
A-L-L
A-L-R
I2C-CLK
SERIAL-GND
A-MUTE
I2C-DATA
HIFI-DATA
HIFI-CLK
SAT-REMO-F
LED-GND
MB
SW9
STBY5
TU-V
NR45
BS1
BS2
AFT-V
SW12
SW5
TO TUNER/VIF
-GSTOP
-CLK


REC-HIFI
PB-HIFI
CUE
REC/EE
TO DECK
ML
LM-1
LM-2
G12
IC5A2
TA7291S
IN2
VSS
OUT 2
NC
GND
VS
OUT 1
VREF
IN1
C5A3 25V 33μ
R5B5 10K 1/10W
R5B6 10K
STBY5
R5C0 10K 1/10W
R5C1 33K 1/10W
Q5A2
C5A4 50V 10μ
R5C2 680 1/10W
R5C3 470 1/10W
Q5A1
C5A5 5.5V Z-.047
C5A6 16V 22μ
Q5A3
R5C4 1K 1/10W
D5A1 HZ4C2
R5C5 220 1/10W
C5A7 50V/25V Z-.1
C5A8 6.3V 47μ
IC5A1
CAT35C104P
/AT93C66-10PC
IC5A5
VCC
NC
OPG
ORG
GND
CS1
CS2
SK
DI
DO
R5A4 10K
R5A5 39K
R5A0 33K 1/10W
R5K5 33K 1/10W
TP5X
TP5J1
TP5J5
TP5J2
TP5J3
TP5J4
R5A1 2.2K 1/10W
R5A2 3.3K 1/10W
R5A3 3.3K 1/10W
C5A0 10V 47μ
TP5C
R5G0 0
TP58
R5B0 0
TP108
TP5K3
R5A6 10K 1/10W
Q5E1 START SENSOR
D5B1 LN59L.MI
Q5E2 END SENSOR
R5A7 10K
TP5J0
R5A8 F-12K 1/10W
R5A9 150
R5B2 F-12K (1/4W)
C5A1 Z-.01
C5A2 Z-.01
TP5J8
R5B1 10K 1/10W
S5A0 RIS
Q5E4 TU-SENSOR
TP109
R5B3 330
TP5K4
R5B4 47K 1/10W
Q5E3 SU-SENSOR
TP110
R5B8 330
TP5J9
R5B7 10K 1/10W
R5B9 47K 1/10W
O-CANAL+1
O-L
O-UL
PO
I-PRT
VEE
I-PWSV
VCC
TU-SENS
AVSS
VREF
I-AR
I-AL
P1-P3
I-ES
I-SS
AFT-V /V-ENV
O-REC/EE
CG-CS
EA/CG-CLK/FLD-CLK
EA/CG-DATA/FLD-DATA/SAT-DATA
EA-SI/FLD-SI
I2C-CLK
N.C
O-HPLS
I2C-DATA
FLDSTRB
SV-CLK.DATA
I-DAVN
O-PB
O-C-MODE
O-HIFI-CLK
O-HIFI-DATA
PR-VSYNC
CANT/SAT-CLK
EA-CS2
TP5K1
TP5A
R5C7 1K
R5C8 1M 1/10W
DAVN
HIFI-CLK
HIFI-DATA
R5M0 3.3K 1/10W
R5M1 3.3K 1/10W
SW5
C5L5 1000
R5L5 100K 1/10W
Q5F0
2SA933S-R.S
/2SA1309A-R.S
R5F5 4.7K 1/10W
C5F1 50V 1μ
Q5F1
Q5B8
R5H3 10K 1/10W
R5H4 18K 1/10W
R5K7 1M 1/10W
C5C7 Z-.01
TPSAT
J5A1
SAT-CONT-OUT
SAT-CLK
SAT-DATA
GND
RESET
STBY5
SAT-REMO-R
SAT-REMO-F
LED-GND
N.C
MS
TO PCB-SAT SS
SW5
I2C-CLK
I2C-DATA
DAVN
H-SYNC
V-SYNC-L
VSYNC
CG-CLK
RESET
CG-CS
CG-DATA
50/60HZ
CG/VPS
R5F8 2.2K 1/10W
CROT
TP5K5
PB5
HA-PB5
C-MODE
COMP
ROT
SS-V-SYNC
50/60HZ
SP

O :Emoloyed X :Not emoloyed

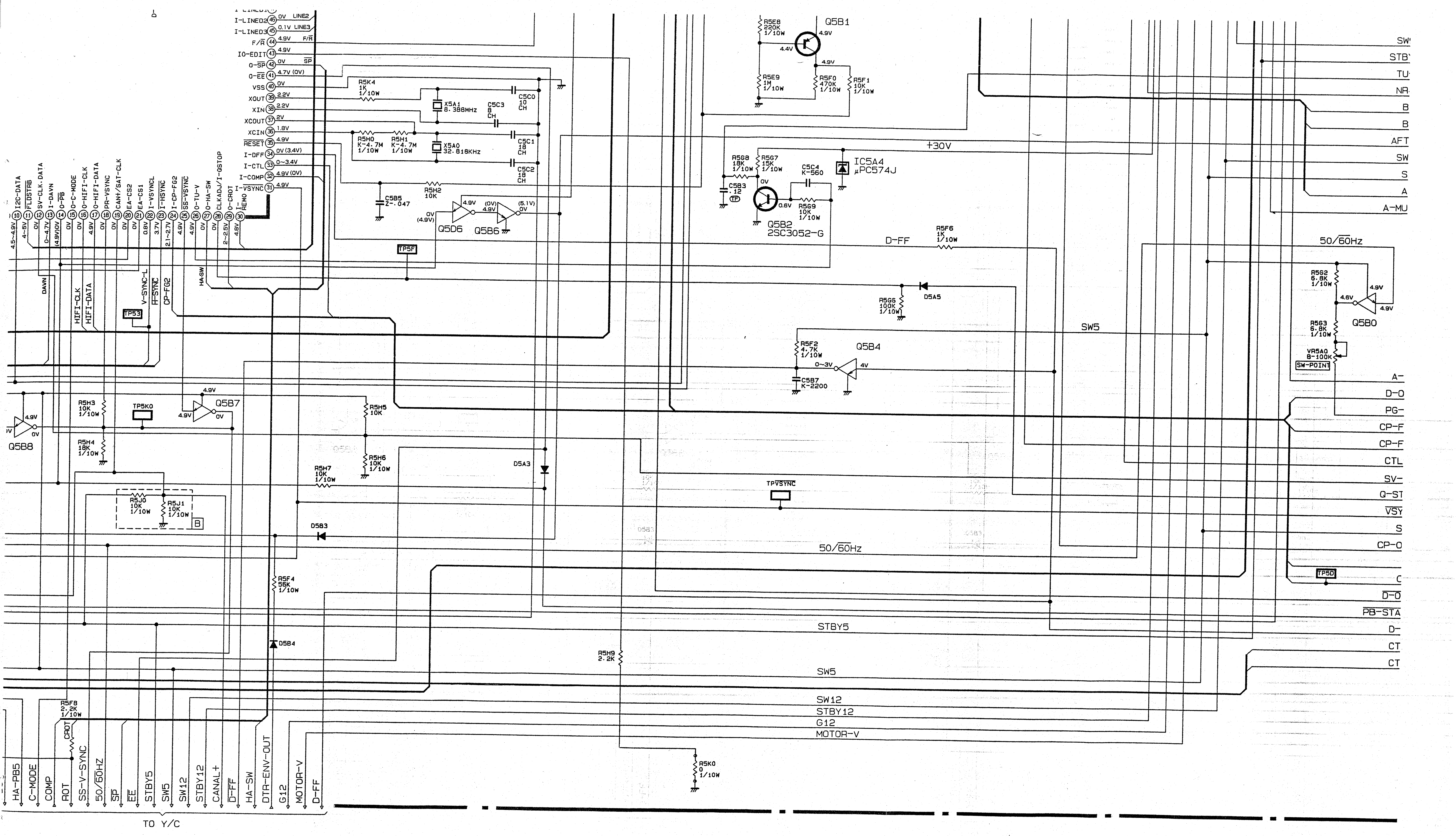
| SYMBOL | B | E | IC5A5 | D | IC5A0 | R5J2 |
|---|---|---|---|---|---|---|
| ADDRESS | h-9 | g-3 | g-3 | d-7 | e-10 | d-7 |
| 551V(Y) | O | X | —— | O | 096 | O |
| 551V(B) | X | O | AT93C56-10PC | X | 097 | X |
| 551V(E) | O | X | —— | O | 098 | O |
| 551V(IR) | X | O | AT93C56-10PC | X | 097 | X |
| 551V(G) | O | O | CAT35C104P/AT93C66-10PC | X | 096 | O |
| 551V(A) | X | X | —— | X | 098 | X |
| 551V(NZ) | X | X | —— | X | 119 | X |
| 550V(B) | X | X | —— | X | 097 | X |

All dio
All NPN
All PNP

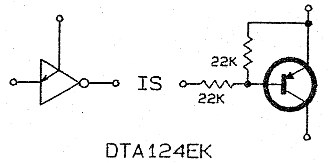


-550V(B)
-551V(B)/V(G)/V(E)/V(Y)/V(IR)

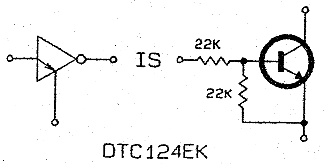
⑥


I-LINED2 46
I-LINED3 45
F/R 44
IO-EDIT 43
O-SP 42
O-EE 41
VSS 40
XOUT 39
XIN 38
XCOUT 37
XCIN 36
RESET 35
I-DFF 34
I-CTL 33
I-COMP 32
I-VSYNC 31
I2C-DATA
FLDSTRB
SV-CLK.DATA
I-DAVN
O-PB
O-C-MODE
O-HIFI-CLK
O-HIFI-DATA
PR-VSYNC
CAN+/SAT-CLK
EA-CS2
EA-CS1
I-VSYNCL
I-HSYNC
I-CP-FG2
SS-VSYNC
O-TU-V
O-HA-SW
CLKADJ/I-QSTOP
O-CROT
I-REMO
R5K4 1K 1/10W
X5A1 8.388MHz
C5C3 8 CH
C5C0 10 CH
R5H0 K-4.7M 1/10W
R5H1 K-4.7M 1/10W
X5A0 32.818KHz
C5C1 18 CH
C5C2 18 CH
C5B5 Z-.047
R5H2 10K
Q5D6
Q5B6
TP5F
R5E8 220K 1/10W
Q5B1
R5E9 1M 1/10W
R5F0 470K 1/10W
R5F1 10K 1/10W
+30V
R5G8 18K 1/10W
R5G7 15K 1/10W
C5C4 K-560
IC5A4 µPC574J
C5B3 .12
Q5B2 2SC3052-G
R5G9 10K 1/10W
D-FF
R5F6 1K 1/10W
50/60Hz
R5G2 6.8K 1/10W
Q5B0
R5G3 6.8K 1/10W
VR5A0 B-100K
SW-POINT
D5A5
R5G6 100K 1/10W
SW5
R5F2 4.7K 1/10W
Q5B4
C5B7 K-2200
DAVN
HIFI-CLK
HIFI-DATA
V-SYNC-L
H-SYNC
CP-FG2
HASW
TP53
Q5B8
R5H3 10K 1/10W
TP5K0
Q5B7
R5H4 18K 1/10W
R5H5 10K
R5H6 10K 1/10W
R5H7 10K 1/10W
D5A3
TPVSYNC
R5J0 10K 1/10W
R5J1 10K 1/10W
B
D5B3
50/60Hz
R5F4 56K 1/10W
D5B4
R5H9 2.2K
STBY5
SW5
SW12
STBY12
G12
MOTOR-V
R5K0 0 1/10W
R5F8 2.2K 1/10W
TP5D
SW
STB
TU
NR
B
B
AFT
SW
S
A
A-MU
A-
D-O
PG-
CP-F
CP-F
CTL
SV-
Q-ST
VSY
S
CP-O
C
D-O
PB-STA
D-
CT
CT
HA-PB5
C-MODE
COMP
ROT
CROT
SS-V-SYNC
50/60HZ
SP
EE
STBY5
SW5
SW12
STBY12
CANAL+
D-FF
HA-SW
DTR-ENV-OUT
G12
MOTOR-V
D-FF
TO Y/C

All diodes are 1SS252/1SS131 unless otherwise specified.
All NPN transistors are 2SC3052-E.F unless otherwise specified.
All PNP transistors are 2SA1235-E.F unless otherwise specified.

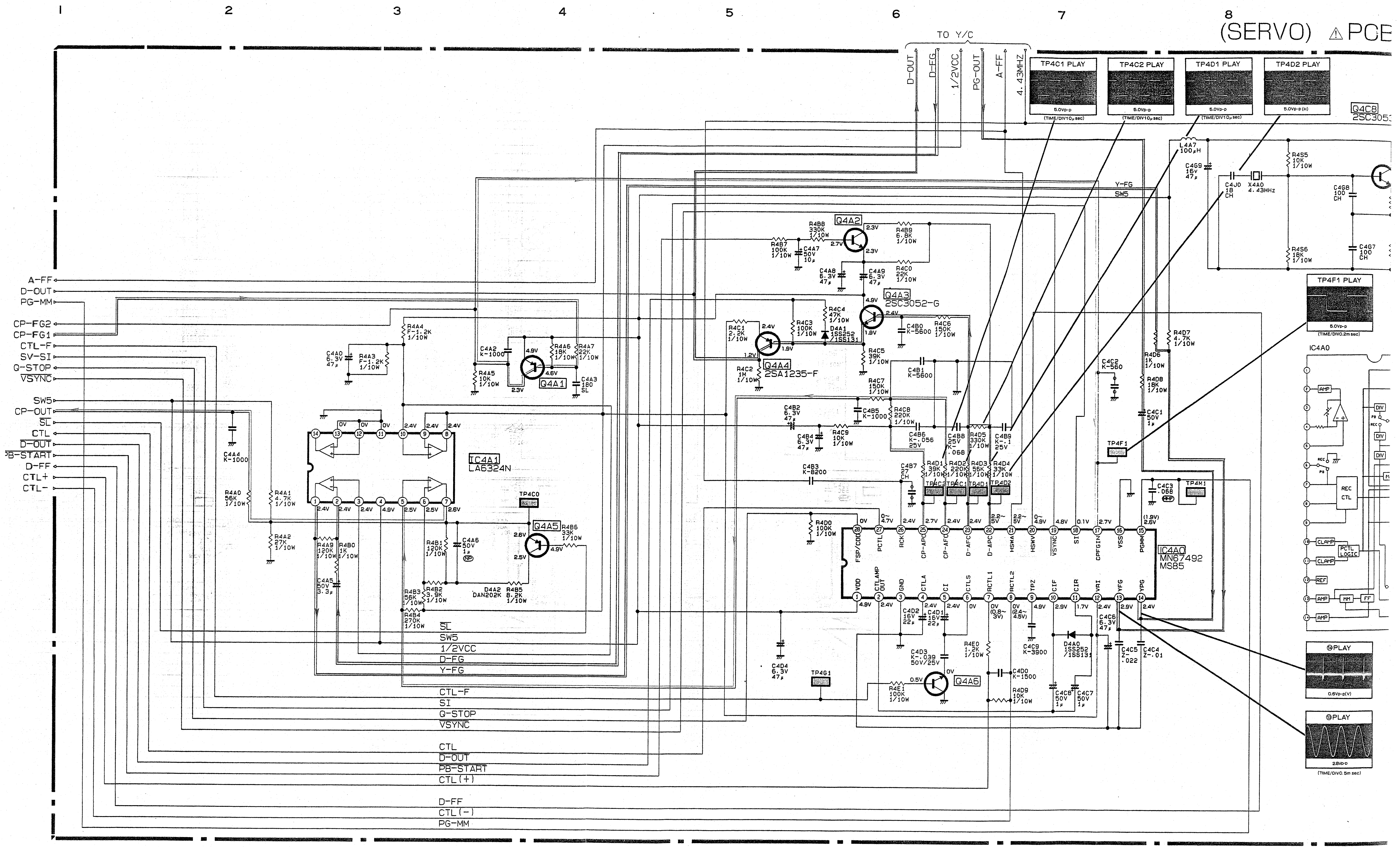


DTA124EK



DTC124EK

## (SERVO) ⚠PCE



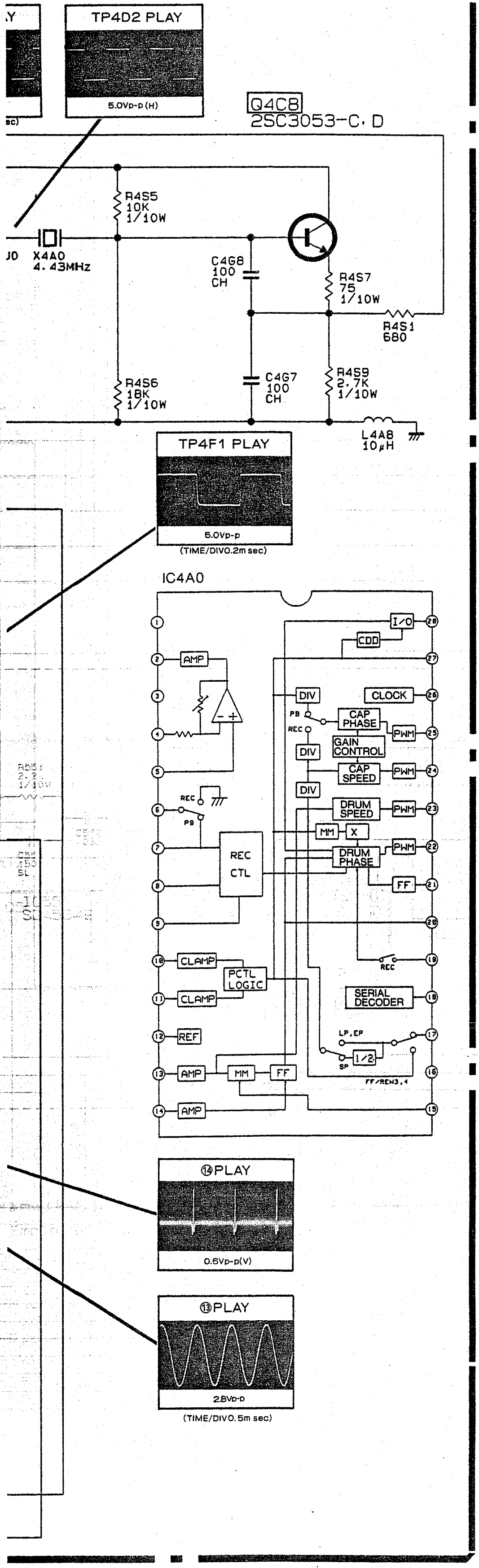
1
2
3
4
5
6
7
8
TO Y/C
D-OUT
D-FG
1/2VCC
PG-OUT
A-FF
4.43MHZ
TP4C1 PLAY
TP4C2 PLAY
TP4D1 PLAY
TP4D2 PLAY
TP4F1 PLAY
⑭PLAY
⑬PLAY
Q4C8 2SC305
A-FF
D-OUT
PG-MM
CP-FG2
CP-FG1
CTL-F
SV-SI
Q-STOP
VSYNC
SW5
CP-OUT
SL
CTL
D-OUT
PB-START
D-FF
CTL+
CTL-
Q4A1
Q4A2
Q4A3 2SC3052-G
Q4A4 2SA1235-F
Q4A5
Q4A6
IC4A1 LA6324N
IC4A0 MN67492 MS85
IC4A0
TP4C0
TP4G1
TP4M1
TP4F1
L4A7 100μH
X4A0 4.43MHZ
D4A0 1SS252 /1SS131
D4A1 1SS252 /1SS131
D4A2 DAN202K
Y-FG
SW5
SL
SW5
1/2VCC
D-FG
Y-FG
CTL-F
SI
Q-STOP
VSYNC
CTL
D-OUT
PB-START
CTL(+)
D-FF
CTL(-)
PG-MM
FSP/CDD
PCTL
RCK
CP-APC
CP-AFC
D-AFC
D-APC
HSWA
HSWB
VSYNC
SI
CPFGIN
VSS
PGMM
VDD
CTLAMP OUT
GND
CTLA
CI
CTLS
RCTL1
RCTL2
TPZ
CIF
CIR
VRI
VFG
YPG
REC CTL
PCTL LOGIC
AMP
CLAMP
REF
MM
FF
DIV

All NPN transistors are 2SC3052-E·F unless otherwise specified.
All PNP transistors are 2SA1235-E·F unless otherwise specified.

Drum Se
Capstan

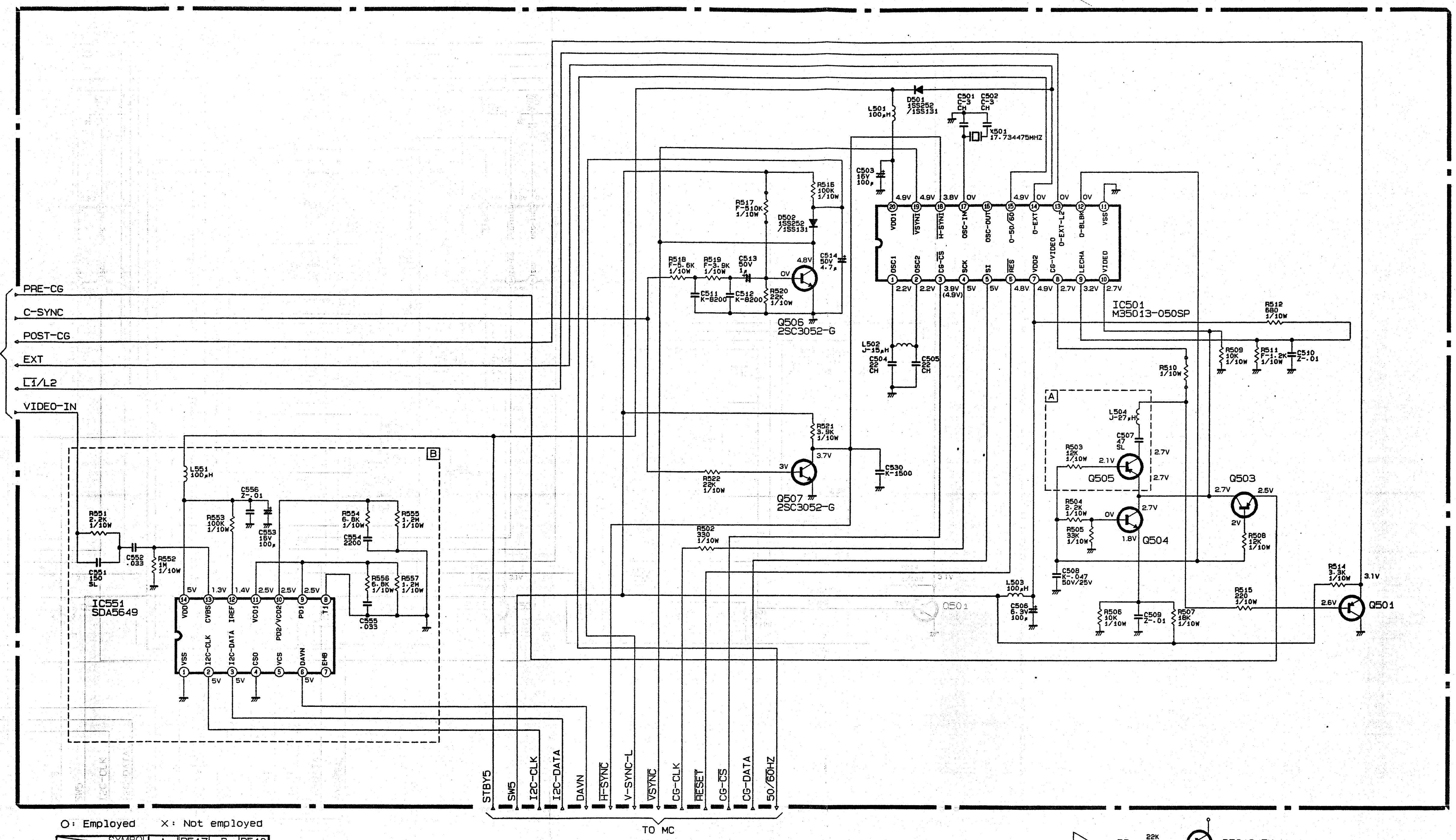
# ERVO) ⚠PCB-MAIN

# (CG/VPS) ⚠PCB-MAIN


9
TP4D2 PLAY
5.0Vp-p(H)
Q4C8
2SC3053-C, D
R4S5
10K
1/10W
X4A0
4.43MHz
C4S8
100
CH
R4S7
75
1/10W
R4S1
680
R4S6
18K
1/10W
C4S7
100
CH
R4S9
2.7K
1/10W
L4A8
10µH
TP4F1 PLAY
5.0Vp-p
(TIME/DIV0.2m sec)
IC4A0
AMP
I/O
CDD
CLOCK
DIV
CAP PHASE
GAIN CONTROL
CAP SPEED
DRUM SPEED
DRUM PHASE
PWM
MM
X
FF
REC CTL
REC
PB
CLAMP
PCTL LOGIC
SERIAL DECODER
REF
LP.EP
SP
1/2
FF/REW3, 4
⑭PLAY
0.6Vp-p(V)
⑬PLAY
2.8Vp-p
(TIME/DIV0.5m sec)

———— Drum Servo System

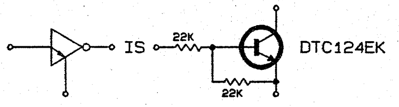
———— Capstan Servo System


10
11
12
13
14
15
16
TO Y/C
PRE-CG
C-SYNC
POST-CG
EXT
L1/L2
VIDEO-IN
B
IC551
SDA5649
VDD
CVBS
IREF
VCO1
PD2/VCO2
PD1
T1
VSS
I2C-CLK
I2C-DATA
CS0
VCS
DAVN
EHB
L551
100µH
R551
2.2K
1/10W
C551
150
SL
C552
.033
R552
1M
1/10W
R553
100K
1/10W
C556
Z-.01
C553
16V
100µ
R554
6.8K
1/10W
C554
2200
R555
1.2M
1/10W
R556
6.8K
1/10W
R557
1.2M
1/10W
C555
.033
5V
1.3V
1.4V
2.5V
R518
F-5.6K
1/10W
R519
F-3.9K
1/10W
C513
50V
1µ
C511
K-8200
C512
K-8200
R520
22K
1/10W
R517
F-510K
1/10W
R516
100K
1/10W
D502
1SS252
/1SS131
C514
50V
4.7µ
4.8V
0V
Q506
2SC3052-G
R521
3.9K
1/10W
3.7V
3V
R522
22K
1/10W
Q507
2SC3052-G
C530
K-1500
R502
330
1/10W
L501
100µH
D501
1SS252
/1SS131
C501
C-3
CH
C502
C-3
CH
X501
17.734475MHZ
C503
16V
100µ
IC501
M35013-050SP
VDD1
VSYN1
H-SYN1
OSC-IN
OSC-OUT
O-50/60
O-EXT
O-EXT-L2
O-BLBK
VSS
OSC1
OSC2
CG-CS
SCK
SI
RES
VDD2
CG-VIDEO
LECHA
VIDEO
4.9V
3.8V
2.2V
3.9V
(4.9V)
2.7V
3.2V
L502
J-15µH
C504
22
CH
C505
22
CH
L503
100µH
C506
6.3V
100µ
R512
680
1/10W
R509
10K
1/10W
R511
F-1.2K
1/10W
C510
Z-.01
R510
1/10W
A
L504
J-27µH
C507
47
SL
R503
12K
1/10W
2.1V
Q505
R504
2.2K
1/10W
R505
33K
1/10W
1.8V
Q504
C508
K-.047
50V/25V
R506
10K
1/10W
C509
Z-.01
R507
18K
1/10W
Q503
2.5V
2V
R508
12K
1/10W
R514
3.3K
1/10W
3.1V
R515
220
1/10W
2.6V
Q501
STBY5
SW5
I2C-CLK
I2C-DATA
DAVN
H-SYNC
V-SYNC-L
VSYNC
CG-CLK
RESET
CG-CS
CG-DATA
50/60HZ
TO MC

○: Employed  ×: Not employed

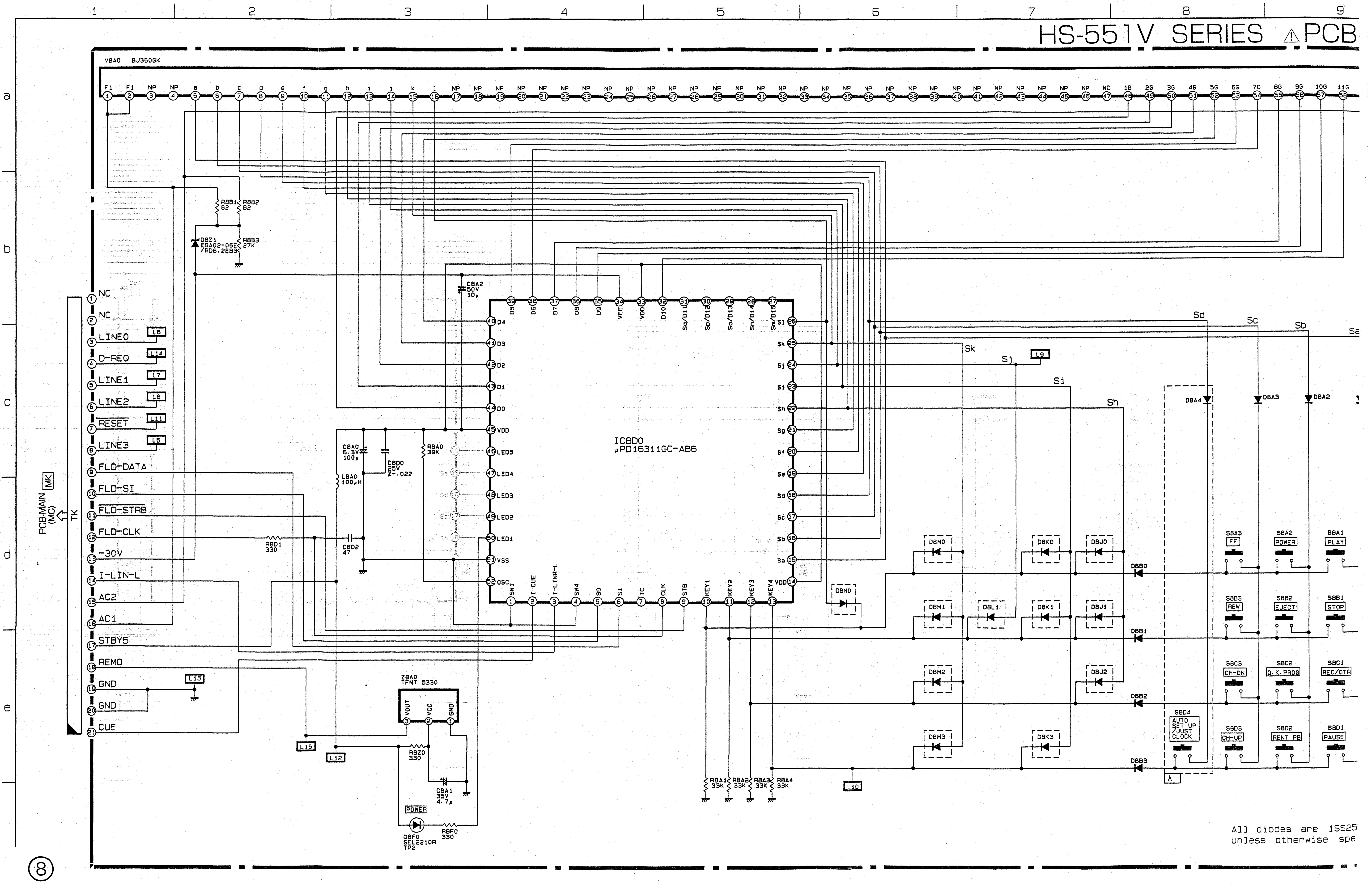
| MODEL \ SYMBOL | A | R517 | B | R510 |
|---|---|---|---|---|
| HS-551V(Y) | ○ | × | × | 390 |
| HS-551V(B) | × | × | ○ | 0Ω |
| HS-551V(E) | ○ | × | ○ | 390 |
| HS-551V(IR) | × | × | ○ | 0Ω |
| HS-551V(G) | ○ | × | ○ | 390 |
| HS-551V(A) | × | ○ | × | 0Ω |
| HS-551V(NZ) | × | × | × | 0Ω |
| HS-550V(B) | × | × | × | 0Ω |

All NPN transistors are 2SC3052-E, F unless otherwise specified.
All PNP transistors are 2SA1235-E, F unless otherwise specified.


IS
22K
22K
DTC124EK

HS-550V(B)
HS-551V(B)/V(G)/V(E)/V(Y)/V(IR)

# HS-551V SERIES ⚠PCB



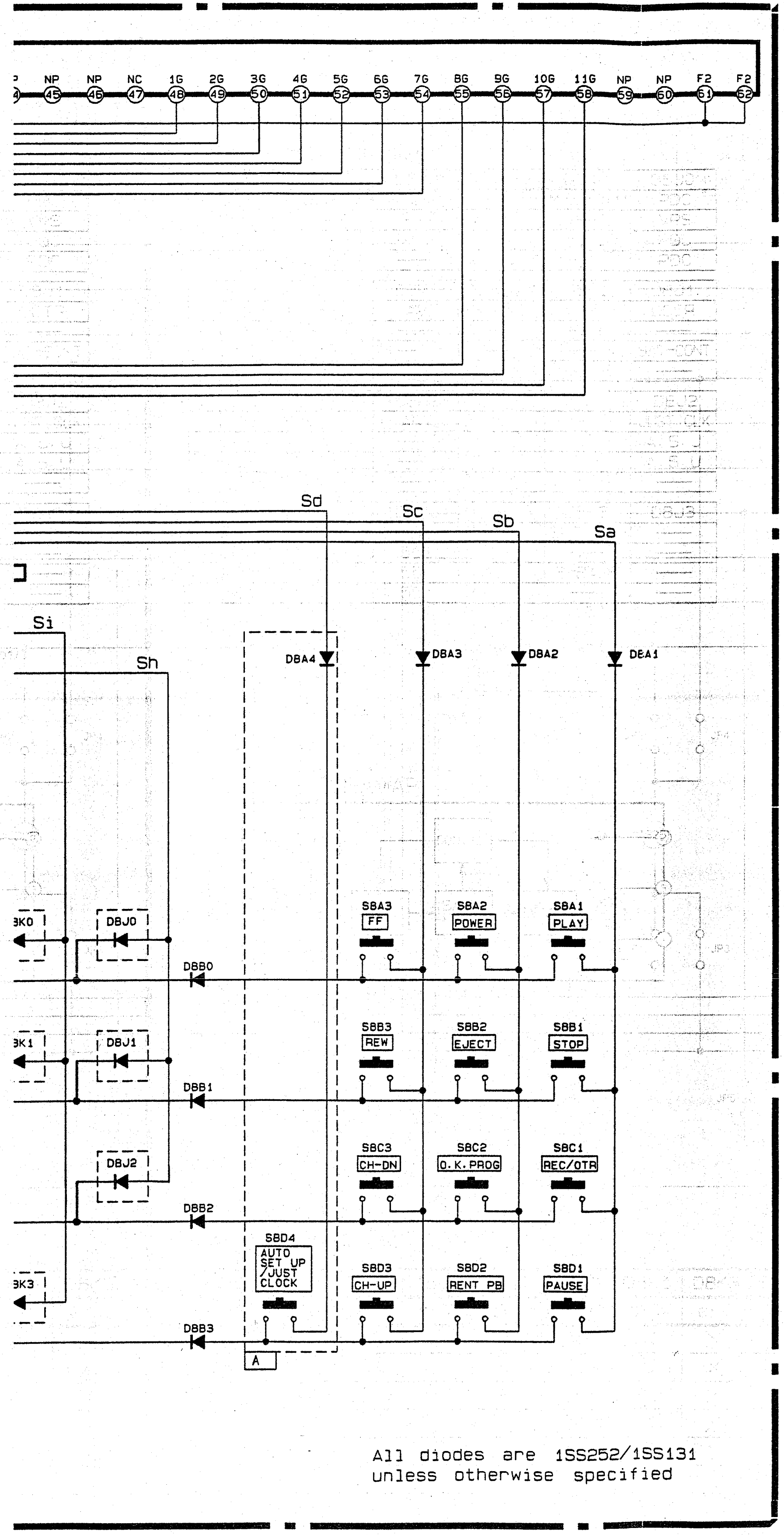
1
2
3
4
5
6
7
8
9
a
b
c
d
e
VBA0 BJ360GK
F1
F1
NP
NC
a
b
c
d
e
f
g
h
i
j
k
l
1G
2G
3G
4G
5G
6G
7G
8G
9G
10G
11G
RBB1 82
RBB2 82
RBB3 27K
DBZ1 EQA02-06E /RD6.2EB3
CBA2 50V 10μ
IC8D0 μPD16311GC-AB6
D4
D3
D2
D1
D0
VDD
LED5
LED4
LED3
LED2
LED1
VSS
OSC
D5
D6
D7
D8
D9
VEE
VDD
D10
Sq/D11
Sp/D12
So/D13
Sn/D14
Sm/D15
S1
Sk
Sj
Si
Sh
Sg
Sf
Se
Sd
Sc
Sb
Sa
SW1
I-CUE
I-LINA-L
SW4
SO
SI
IC
CLK
STB
KEY1
KEY2
KEY3
KEY4
CBA0 6.3V 100μ
CBD0 25V Z-.022
LBA0 100μH
RBA0 39K
RBD1 330
CBD2 47
NC
NC
LINE0
D-REQ
LINE1
LINE2
RESET
LINE3
FLD-DATA
FLD-SI
FLD-STRB
FLD-CLK
-3CV
I-LIN-L
AC2
AC1
STBY5
REMO
GND
GND
CUE
L6
L14
L7
L6
L11
L5
L13
L15
L12
L9
L10
PCB-MAIN (MC)
MK
TK
ZBA0 TFMT 5330
VOUT
VCC
GND
RBZ0 330
CBA1 35V 4.7μ
POWER
DBF0 SEL2210R TP2
RBF0 330
RBA1 33K
RBA2 33K
RBA3 33K
RBA4 33K
Sd
Sc
Sb
Sa
Sk
Sj
Si
Sh
DBA4
DBA3
DBA2
DBM0
DBM1
DBM2
DBM3
DBL1
DBK0
DBK1
DBK3
DBJ0
DBJ1
DBJ2
DBN0
DBB0
DBB1
DBB2
DBB3
SBA3 FF
SBA2 POWER
SBA1 PLAY
SBB3 REW
SBB2 EJECT
SBB1 STOP
SBC3 CH-DN
SBC2 O.K.PROG
SBC1 REC/OTR
SBD4 AUTO SET UP /JUST CLOCK
SBD3 CH-UP
SBD2 RENT PB
SBD1 PAUSE
A

All diodes are 1SS25
unless otherwise spe

√(E)/V(Y)/V(IR)

⑧

# HS-551V SERIES ⚠PCB-TIMER


NP 45
NP 46
NC 47
1G 48
2G 49
3G 50
4G 51
5G 52
6G 53
7G 54
8G 55
9G 56
10G 57
11G 58
NP 59
NP 60
F2 61
F2 62
Sd
Sc
Sb
Sa
Si
Sh
D8A4
D8A3
D8A2
D8A1
D8K0
D8J0
D8K1
D8J1
D8J2
D8K3
D8B0
D8B1
D8B2
D8B3
S8A3 FF
S8A2 POWER
S8A1 PLAY
S8B3 REW
S8B2 EJECT
S8B1 STOP
S8C3 CH-DN
S8C2 O.K.PROG
S8C1 REC/OTR
S8D4 AUTO SET UP /JUST CLOCK
S8D3 CH-UP
S8D2 RENT PB
S8D1 PAUSE
A

All diodes are 1SS252/1SS131 unless otherwise specified

FUNCTION SELECTOR MAP

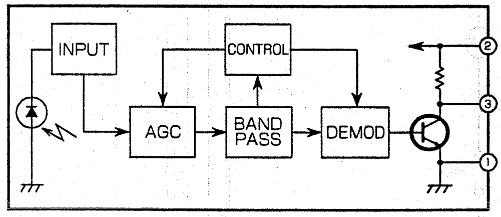
| | D8N0 | D8M0 | | D8K0 | D8J0 |
|---|---|---|---|---|---|
| E・A | JOGREMO | NICAM | | MESECAM | PDC |
| G・Y | —— | —— | | —— | VPS |
| B・IR | —— | —— | | U-ONLY | PDC |
| NZ | $\overline{\text{JOGREMO}}$ | —— | | —— | PDC |

| | D8N1 | D8M1 | D8L1 | D8K1 | D8J1 |
|---|---|---|---|---|---|
| E・A | —— | A2 | SHOWVIEW | C+ SCRT | CCIR |
| G・Y | —— | —— | —— | —— | —— |
| B・IR | —— | —— | —— | —— | SAT-CONT |
| NZ | —— | —— | —— | —— | —— |

| | | D8M2 | | | D8J2 |
|---|---|---|---|---|---|
| E・A | | ANT | | | JUST CLK |
| G・Y | | —— | | | A.S.U |
| B・IR | | —— | | | A.S.U |
| NZ | | —— | | | —— |

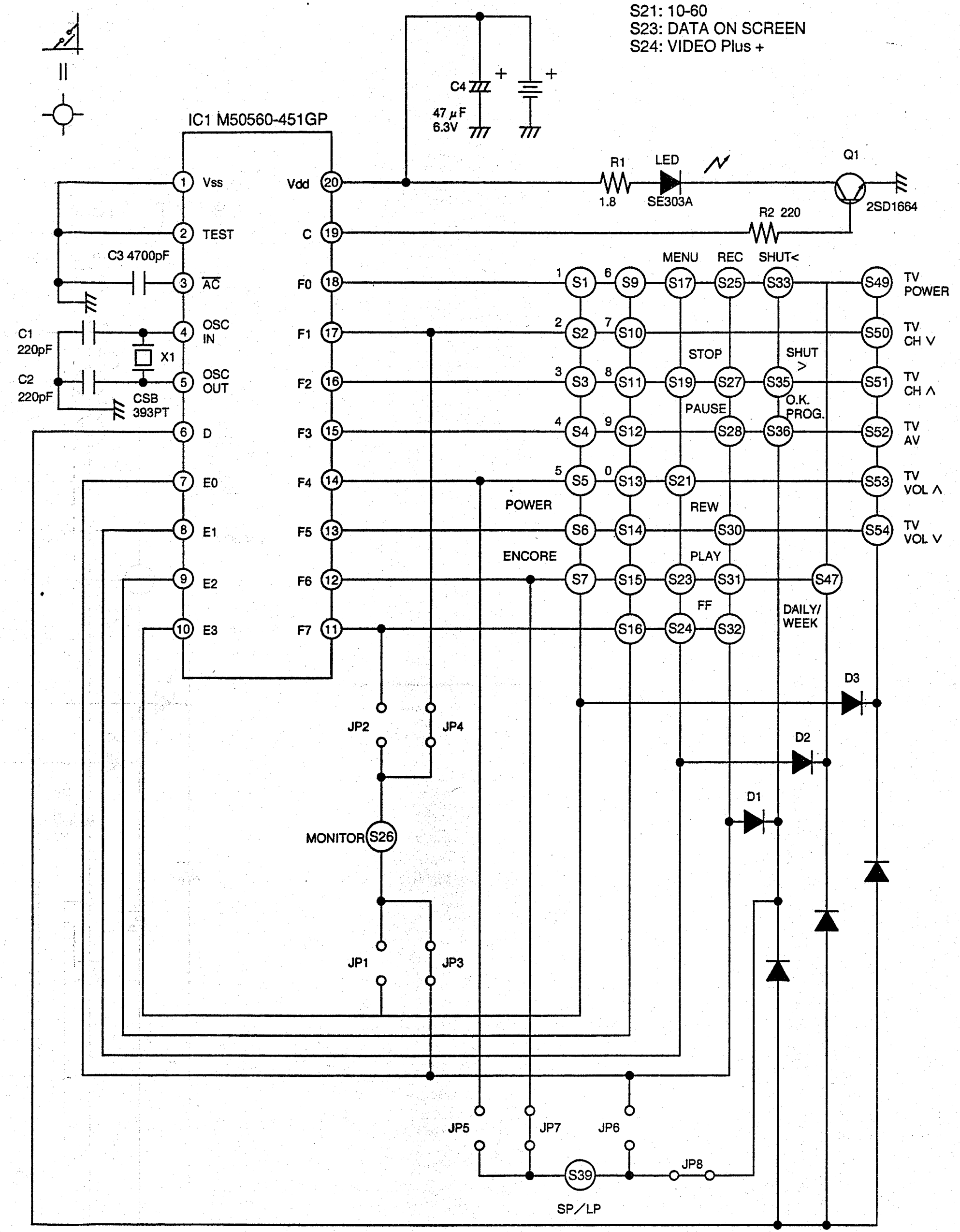
| | | D8M3 | | D8K3 | D8J3 |
|---|---|---|---|---|---|
| E・A | | 551 | | ENGLISH | —— |
| G・Y | | 551 | | —— | —— |
| B・IR | | 551 | | 3-BAND | —— |
| NZ | | 551 | | —— | —— |

## Z8A0 PREAMAP


INPUT
CONTROL
AGC
BAND PASS
DEMOD
2
3
1

## HS-551V(B)/V(E)/V(G)/V(IR)/V(Y) TRANSMITTER REMOTE CONTROL

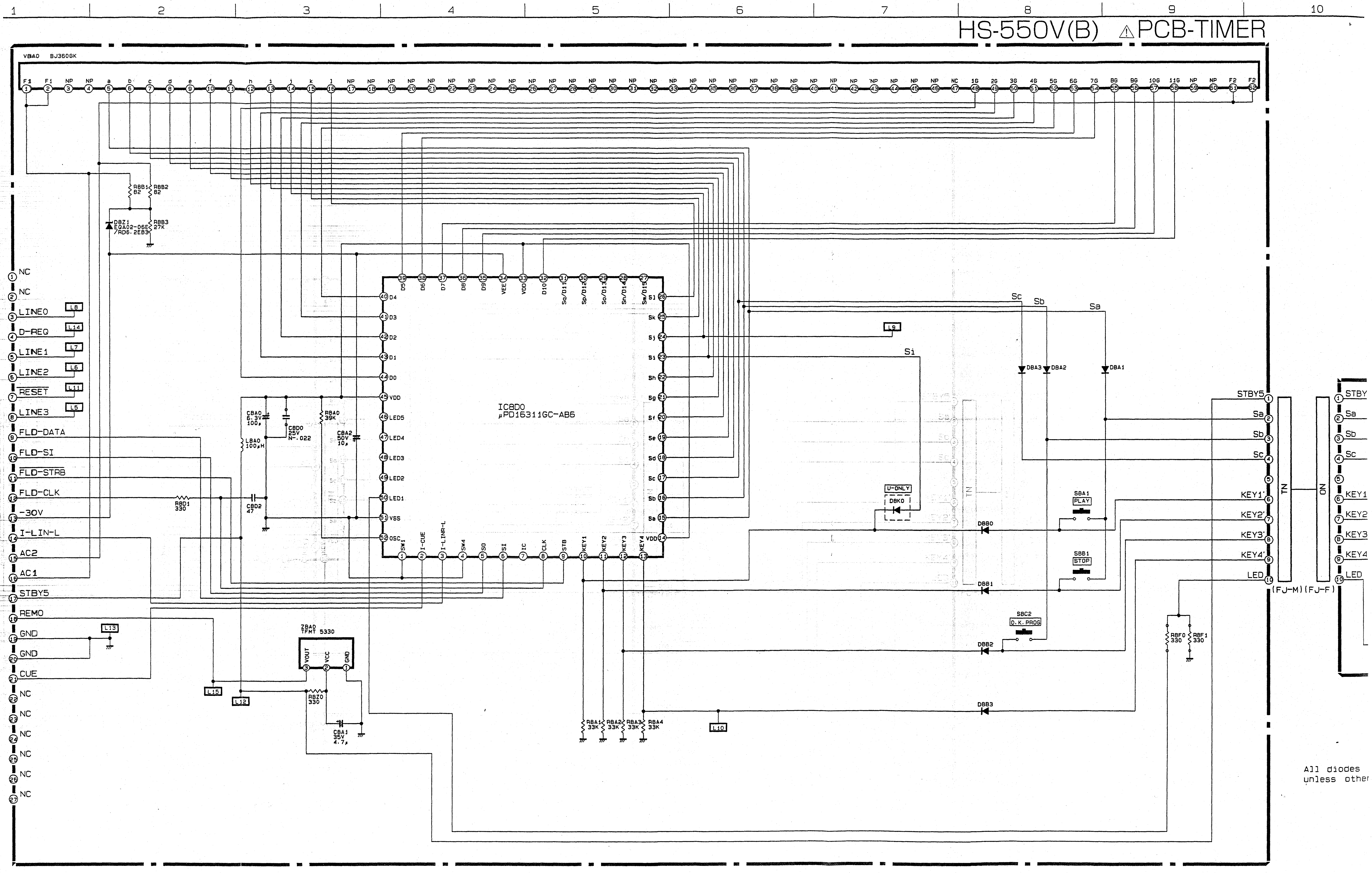
S14: CANCEL
S15: JOG/CHANNEL -
S16: JOG/CHANNEL +
S19: CT-RES/NEXT
S21: 10-60
S23: DATA ON SCREEN
S24: VIDEO Plus +


IC1 M50560-451GP
1 Vss
2 TEST
3 AC
4 OSC IN
5 OSC OUT
6 D
7 E0
8 E1
9 E2
10 E3
Vdd 20
C 19
F0 18
F1 17
F2 16
F3 15
F4 14
F5 13
F6 12
F7 11
C3 4700pF
C1 220pF
C2 220pF
X1
CSB 393PT
C4 47 μF 6.3V
R1 1.8
LED SE303A
R2 220
Q1 2SD1664
MENU
REC
SHUT<
STOP
SHUT >
PAUSE
O.K. PROG.
POWER
REW
ENCORE
PLAY
FF
DAILY/ WEEK
S1
S2
S3
S4
S5
S6
S7
S9
S10
S11
S12
S13
S14
S15
S16
S17
S19
S21
S23
S24
S25
S27
S28
S30
S31
S32
S33
S35
S36
S47
S49 TV POWER
S50 TV CH V
S51 TV CH Λ
S52 TV AV
S53 TV VOL Λ
S54 TV VOL V
D1
D2
D3
JP1
JP2
JP3
JP4
JP5
JP6
JP7
JP8
MONITOR S26
S39 SP/LP

○ :Employed
╳ :Not employed

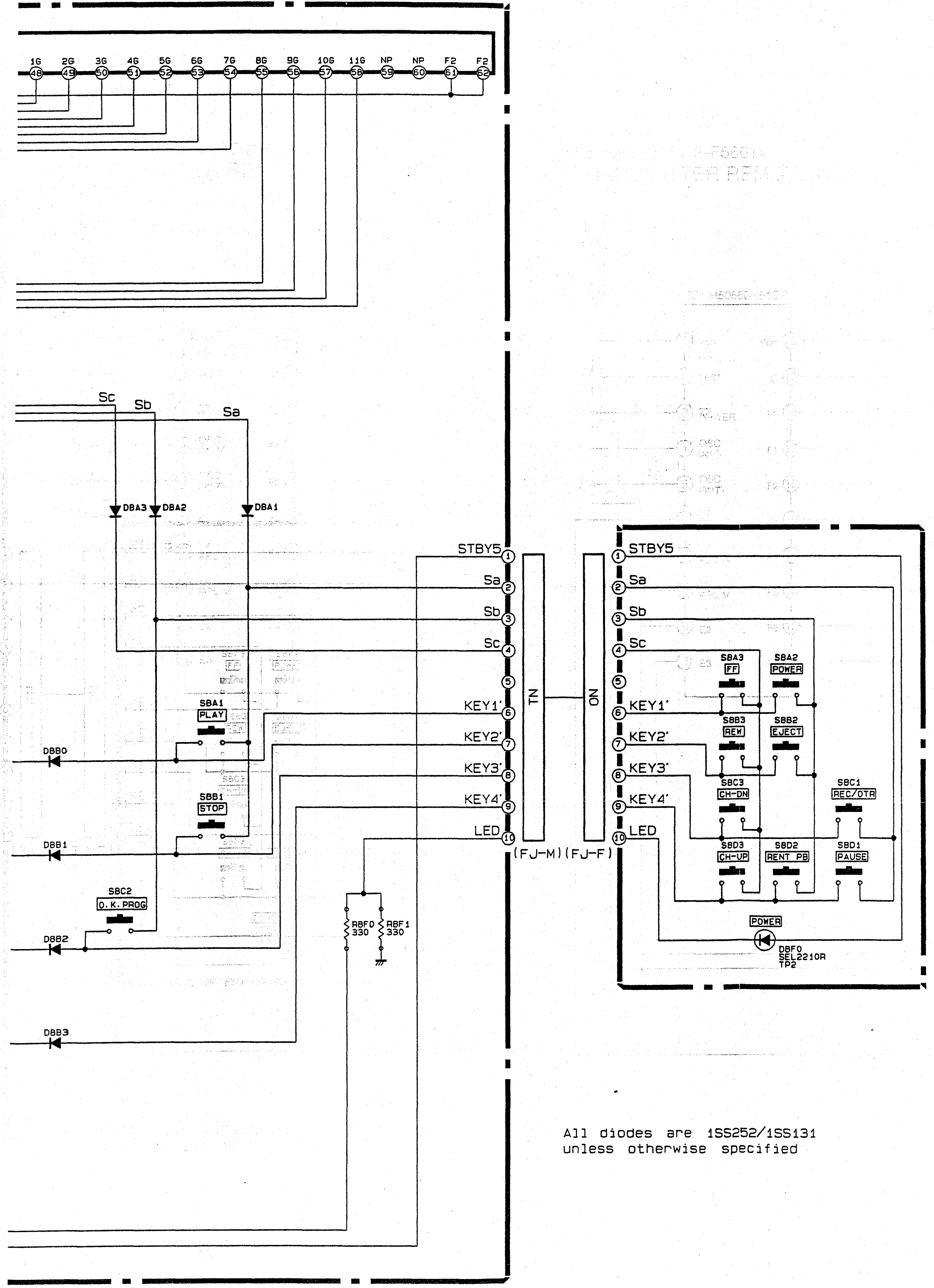
| SYMBOL | D8J0 | D8J1 | D8J2 | D8K0 | D8K1 | D8K3 | D8L1 | D8M0 | D8M1 | D8M2 | D8N0 | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL \ ADDRESS | d-7 | d-7 | e-7 | d-7 | d-7 | e-7 | d-7 | d-6 | d-6 | e-6 | d-6 | d-11 |
| HS-551V(Y) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ |
| HS-551V(B) | ○ | ○ | ○ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ○ |
| HS-551V(G) | ○ | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ○ |
| HS-551V(IR) | ╳ | ╳ | ○ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ○ |
| HS-551V(E) | ○ | ╳ | ○ | ○ | ○ | ╳ | ○ | ○ | ○ | ╳ | ╳ | ○ |
| HS-551V(A) | ╳ | ╳ | ╳ | ╳ | ╳ | ○ | ╳ | ╳ | ○ | ○ | ╳ | ╳ |
| HS-551V(NZ) | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ╳ | ○ | ╳ |

# HS-550V(B) ⚠PCB-TIMER


1
2
3
4
5
6
7
8
9
10
VBA0 BJ360GK
F1
F1
NP
a
b
c
d
e
f
g
h
i
j
k
l
NC
1G
2G
3G
4G
5G
6G
7G
8G
9G
10G
11G
F2
RBB1 82
RBB2 82
RBB3 27K
DBZ1 EQA02-06E /RD6.2EB3
NC
NC
LINE0
D-REQ
LINE1
LINE2
RESET
LINE3
FLD-DATA
FLD-SI
FLD-STRB
FLD-CLK
-30V
I-LIN-L
AC2
AC1
STBY5
REMO
GND
GND
CUE
NC
NC
NC
NC
NC
NC
L8
L14
L7
L6
L11
L5
L13
L15
L12
CBA0 6.3V 100μ
CBD0 25V N.022
RBA0 39K
CBA2 50V 10μ
LBA0 100μH
RBD1 330
CBD2 47
IC8D0
μPD16311GC-AB6
D5
D6
D7
D8
D9
VEE
VDD
D10
Sq/D11
Sp/D12
So/D13
Sn/D14
Sm/D15
D4
D3
D2
D1
D0
VDD
LED5
LED4
LED3
LED2
LED1
VSS
OSC
SW1
I-CUE
I-LINA-L
SW4
SO
SI
IC
CLK
STB
KEY1
KEY2
KEY3
KEY4
Sl
Sk
Sj
Si
Sh
Sg
Sf
Se
Sd
Sc
Sb
Sa
VDD
ZBA0 TFMT 5330
VOUT
VCC
GND
RBZ0 330
CBA1 35V 4.7μ
RBA1 33K
RBA2 33K
RBA3 33K
RBA4 33K
L10
L9
Sc
Sb
Sa
Si
DBA3
DBA2
DBA1
U-ONLY
DBK0
DBB0
DBB1
DBB2
DBB3
SBA1 PLAY
SBB1 STOP
SBC2 O.K.PROG
RBF0 330
RBF1 330
STBY5
Sa
Sb
Sc
KEY1
KEY2
KEY3
KEY4
LED
TN
ON
(FJ-M)
(FJ-F)
STBY
Sa
Sb
Sc
KEY1
KEY2
KEY3
KEY4
LED

All diodes
unless other

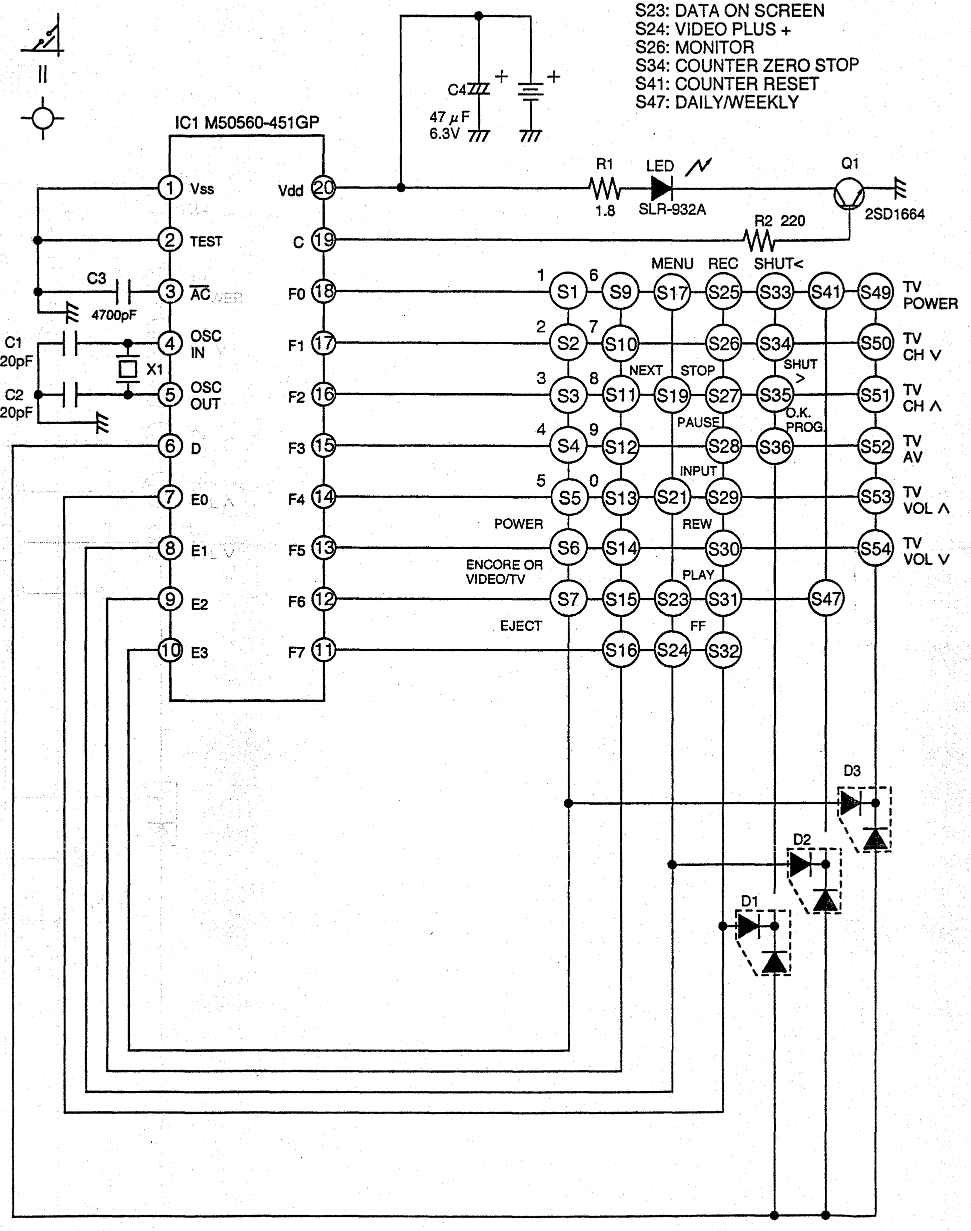
# S-550V(B) ⚠PCB-TIMER


1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G NP NP F2 F2
(48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62)
Sc Sb Sa
DBA3 DBA2 DBA1
STBY5 ①
Sa ②
Sb ③
Sc ④
⑤
KEY1' ⑥
KEY2' ⑦
KEY3' ⑧
KEY4' ⑨
LED ⑩
TN
ON
(FJ-M) (FJ-F)
SBA1 PLAY
SBB1 STOP
SBC2 O.K.PROG
DBB0
DBB1
DBB2
DBB3
RBF0 330
RBF1 330
SBA3 FF
SBA2 POWER
SBB3 REW
SBB2 EJECT
SBC3 CH-DN
SBC1 REC/OTR
SBD3 CH-UP
SBD2 RENT PB
SBD1 PAUSE
POWER
DBF0 SEL2210R TP2

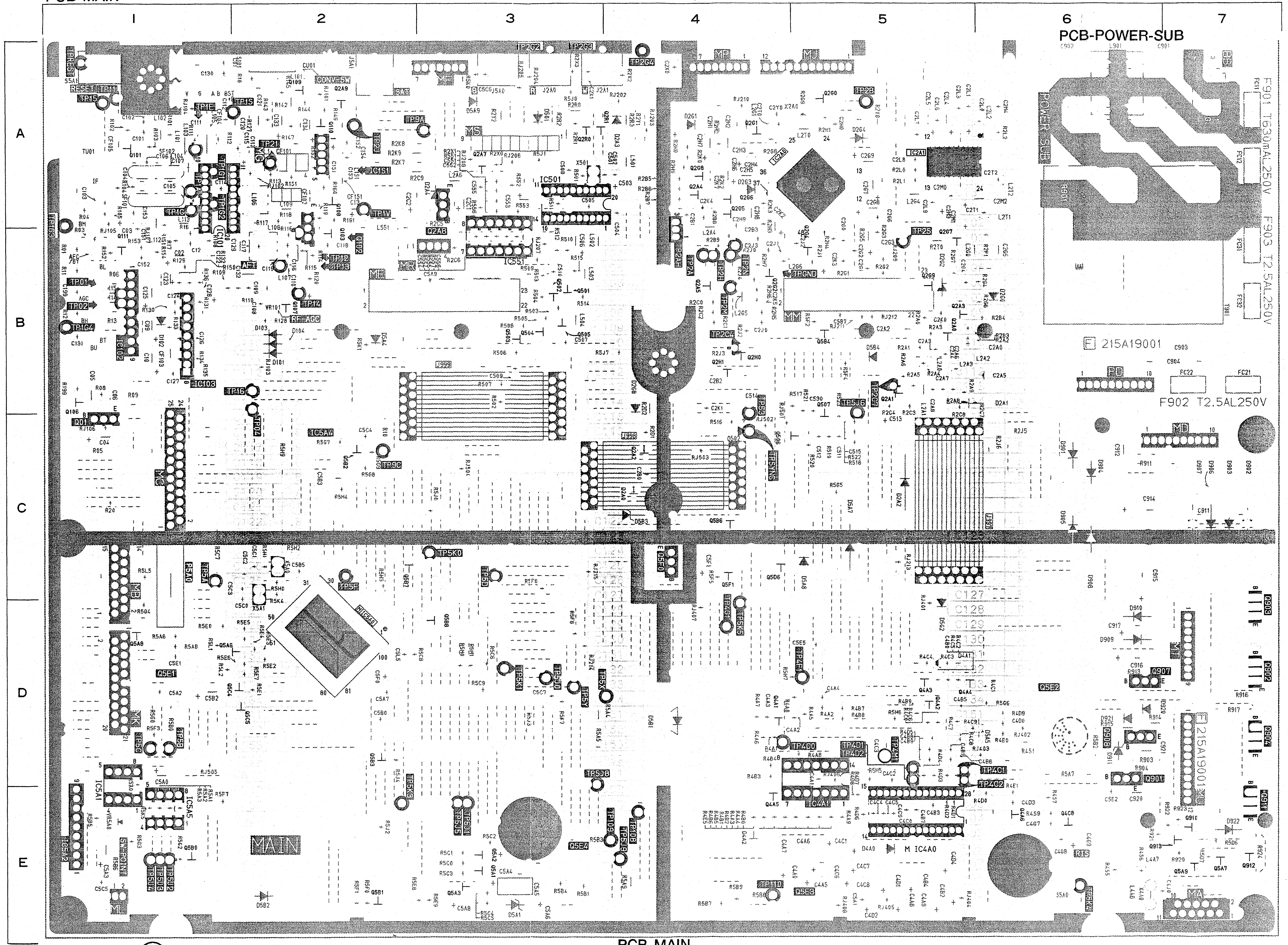
All diodes are 1SS252/1SS131
unless otherwise specified

## HS-550V(B)/ HS-F5601V
## TRANSMITTER REMOTE CONTROL

S14: CANCEL
S15: JOG/CHANNEL -
S16: JOG/CHANNEL +
S21: 10-99
S23: DATA ON SCREEN
S24: VIDEO PLUS +
S26: MONITOR
S34: COUNTER ZERO STOP
S41: COUNTER RESET
S47: DAILY/WEEKLY


IC1 M50560-451GP
① Vss
② TEST
③ AC
④ OSC IN
⑤ OSC OUT
⑥ D
⑦ E0
⑧ E1
⑨ E2
⑩ E3
Vdd ⑳
C ⑲
F0 ⑱
F1 ⑰
F2 ⑯
F3 ⑮
F4 ⑭
F5 ⑬
F6 ⑫
F7 ⑪
C3 4700pF
C1 220pF
C2 220pF
X1
C4 47μF 6.3V
R1 1.8
LED SLR-932A
R2 220
Q1 2SD1664
MENU REC SHUT<
NEXT STOP SHUT >
PAUSE O.K. PROG.
INPUT
REW
PLAY
FF
POWER
ENCORE OR VIDEO/TV
EJECT
S1 S2 S3 S4 S5 S6 S7
S9 S10 S11 S12 S13 S14 S15 S16
S17 S19 S21 S23 S24
S25 S26 S27 S28 S29 S30 S31 S32
S33 S34 S35 S36
S41 S47
S49 S50 S51 S52 S53 S54
1 2 3 4 5 6 7 8 9 0
TV POWER
TV CH V
TV CH Λ
TV AV
TV VOL Λ
TV VOL V
D1 D2 D3

PCB-MAIN


1
2
3
4
5
6
7
A
B
C
D
E
PCB-POWER-SUB
F901 T630mAL250V
F903 T2.5AL250V
F902 T2.5AL250V
215A19001
MAIN
IC501
IC551
IC5A1
IC4A0
IC4A1
IC2A1
CONV-SW
RF-AGC
RESET

PCB-MAIN

550V(B)
551V(B)/V(G)/V(E)/V(Y)/V(IR)

⑩

PCB-MAIN

| SYMBOL NO. | ADDRESS |
|---|---|
| C01 | A – 1 |
| C02 | B – 1 |
| C03 | B – 1 |
| C04 | C – 1 |
| C05 | B – 1 |
| C06 | B – 1 |
| C08 | B – 1 |
| C09 | B – 1 |
| C10 | B – 1 |
| C12 | B – 1 |
| C13 | A – 2 |
| C101 | A – 1 |
| C102 | A – 1 |
| C103 | A – 1 |
| C104 | A – 1 |
| C105 | A – 1 |
| C106 | A – 1 |
| C107 | A – 1 |
| C108 | B – 2 |
| C109 | B – 2 |
| C110 | B – 2 |
| C111 | A – 1 |
| C112 | A – 1 |
| C113 | A – 2 |
| C114 | A – 1 |
| C115 | A – 2 |
| C116 | B – 2 |
| C117 | B – 2 |
| C118 | B – 2 |
| C119 | B – 2 |
| C120 | A – 2 |
| C121 | A – 2 |
| C122 | B – 1 |
| C123 | B – 1 |
| C124 | B – 1 |
| C125 | B – 1 |
| C126 | B – 1 |
| C127 | B – 1 |
| C128 | B – 1 |
| C129 | B – 2 |
| C130 | A – 1 |
| C131 | B – 1 |
| C132 | B – 2 |
| C133 | A – 2 |
| C134 | A – 2 |
| C151 | B – 1 |
| C152 | B – 1 |
| C153 | A – 1 |
| C199 | B – 1 |
| C501 | A – 4 |
| C502 | A – 4 |
| C503 | A – 4 |
| C504 | B – 4 |
| C505 | A – 3 |
| C506 | B – 3 |
| C507 | B – 3 |
| C508 | A – 3 |
| C509 | B – 3 |
| C510 | B – 3 |
| C511 | C – 5 |

| SYMBO NO. |
|---|
| C512 |
| C513 |
| C514 |
| C515 |
| C530 |
| C551 |
| C552 |
| C553 |
| C554 |
| C555 |
| C556 |
| C901 |
| C902 |
| C903 |
| C904 |
| C911 |
| C912 |
| C914 |
| C915 |
| C916 |
| C917 |
| C920 |
| C921 |
| C1S1 |
| C1S2 |
| C1S3 |
| C1S4 |
| C2A0 |
| C2A2 |
| C2A3 |
| C2A4 |
| C2A5 |
| C2A6 |
| C2A7 |
| C2A8 |
| C2B0 |
| C2B1 |
| C2B2 |
| C2B3 |
| C2C1 |
| C2C2 |
| C2G0 |
| C2G1 |
| C2G2 |
| C2G3 |
| C2G4 |
| C2G5 |
| C2G6 |
| C2G7 |
| C2G8 |
| C2G9 |
| C2H0 |
| C2H1 |
| C2H2 |
| C2H3 |
| C2H4 |
| C2H5 |
| C2H6 |
| C2H7 |
| C2H8 |

| SYMBOL NO. | ADDRESS |
|---|---|
| C512 | C – 5 |
| C513 | C – 5 |
| C514 | B – 4 |
| C515 | C – 5 |
| C530 | B – 5 |
| C551 | A – 3 |
| C552 | A – 3 |
| C553 | A – 3 |
| C554 | B – 3 |
| C555 | A – 3 |
| C556 | B – 3 |
| C901 | A – 6 |
| C902 | A – 6 |
| C903 | B – 7 |
| C904 | B – 7 |
| C911 | C – 7 |
| C912 | C – 6 |
| C914 | C – 6 |
| C915 | C – 6 |
| C916 | D – 6 |
| C917 | D – 6 |
| C920 | E – 6 |
| C921 | D – 6 |
| C1S1 | A – 2 |
| C1S2 | A – 2 |
| C1S3 | A – 2 |
| C1S4 | A – 2 |
| C2A0 | B – 6 |
| C2A2 | B – 5 |
| C2A3 | B – 5 |
| C2A4 | B – 5 |
| C2A5 | B – 6 |
| C2A6 | B – 5 |
| C2A7 | B – 5 |
| C2A8 | B – 5 |
| C2B0 | C – 4 |
| C2B1 | A – 4 |
| C2B2 | B – 4 |
| C2B3 | B – 4 |
| C2C1 | A – 3 |
| C2C2 | A – 2 |
| C2G0 | B – 5 |
| C2G1 | B – 5 |
| C2G2 | B – 5 |
| C2G3 | B – 5 |
| C2G4 | B – 5 |
| C2G5 | B – 6 |
| C2G6 | A – 5 |
| C2G7 | A – 5 |
| C2G8 | A – 5 |
| C2G9 | A – 5 |
| C2H0 | A – 5 |
| C2H1 | A – 4 |
| C2H2 | A – 4 |
| C2H3 | A – 4 |
| C2H4 | A – 4 |
| C2H5 | A – 4 |
| C2H6 | A – 4 |
| C2H7 | A – 4 |
| C2H8 | A – 4 |

| SYMBOL NO. | ADDRESS |
|---|---|
| C2H9 | A – 4 |
| C2J0 | B – 4 |
| C2J1 | B – 4 |
| C2J2 | B – 5 |
| C2J3 | B – 4 |
| C2K0 | B – 5 |
| C2K1 | C – 4 |
| C2K2 | A – 4 |
| C2K3 | B – 5 |
| C2K4 | A – 4 |
| C2K5 | B – 4 |
| C2K7 | A – 4 |
| C2L0 | A – 5 |
| C2L2 | A – 5 |
| C2L3 | A – 5 |
| C2L4 | A – 5 |
| C2L5 | A – 5 |
| C2L6 | A – 5 |
| C2L7 | A – 5 |
| C2L8 | A – 5 |
| C2L9 | A – 5 |
| C2M0 | A – 5 |
| C2M1 | A – 5 |
| C2M2 | A – 6 |
| C2M3 | A – 5 |
| C2M4 | A – 6 |
| C2T0 | A – 4 |
| C2T1 | A – 5 |
| C2T2 | A – 6 |
| C2X0 | A – 4 |
| C2X1 | A – 3 |
| C2Y0 | A – 4 |
| C3L1 | A – 5 |
| C4A0 | E – 5 |
| C4A1 | D – 5 |
| C4A2 | D – 4 |
| C4A3 | D – 4 |
| C4A4 | D – 5 |
| C4A5 | E – 5 |
| C4A6 | E – 5 |
| C4A7 | E – 4 |
| C4A8 | E – 5 |
| C4A9 | E – 5 |
| C4B0 | D – 5 |
| C4B1 | D – 5 |
| C4B2 | E – 5 |
| C4B3 | E – 5 |
| C4B4 | E – 5 |
| C4B5 | D – 5 |
| C4B6 | D – 5 |
| C4B7 | E – 5 |
| C4B8 | D – 5 |
| C4B9 | D – 5 |
| C4C0 | E – 5 |
| C4C1 | E – 5 |
| C4C2 | D – 5 |
| C4C3 | D – 5 |
| C4C4 | E – 5 |
| C4C5 | E – 5 |
| C4C6 | E – 5 |

| SYMBOL NO. | ADDRESS |
|---|---|
| C4C7 | E – 5 |
| C4C8 | E – 5 |
| C4C9 | E – 5 |
| C4D0 | D – 6 |
| C4D1 | E – 5 |
| C4D2 | E – 5 |
| C4D3 | E – 6 |
| C4D4 | E – 5 |
| C4G7 | E – 6 |
| C4G8 | E – 6 |
| C4G9 | E – 6 |
| C4J0 | E – 7 |
| C5A0 | E – 1 |
| C5A1 | E – 5 |
| C5A2 | D – 1 |
| C5A3 | E – 1 |
| C5A4 | E – 3 |
| C5A5 | E – 3 |
| C5A6 | E – 3 |
| C5A7 | D – 2 |
| C5A8 | E – 3 |
| C5B0 | D – 2 |
| C5B2 | D – 1 |
| C5B3 | C – 2 |
| C5B5 | C – 2 |
| C5B7 | B – 5 |
| C5C0 | D – 2 |
| C5C1 | C – 2 |
| C5C2 | C – 2 |
| C5C3 | C – 2 |
| C5C4 | C – 2 |
| C5C5 | E – 1 |
| C5C6 | A – 3 |
| C5C7 | D – 3 |
| C5E1 | D – 1 |
| C5E2 | E – 6 |
| C5E5 | D – 5 |
| C5F0 | D – 2 |
| C5F1 | C – 4 |
| C5L5 | D – 2 |
| | |
| CF101 | A – 2 |
| CF102 | A – 2 |
| CF103 | B – 1 |
| CF104 | A – 1 |
| CF105 | A – 1 |
| CF1S1 | A – 2 |
| | |
| CU01 | A – 2 |
| | |
| D101 | B – 2 |
| D102 | B – 1 |
| D103 | B – 2 |
| D104 | B – 2 |
| D501 | A – 3 |
| D502 | B – 3 |
| D502 | C – 4 |
| D901 | C – 6 |
| D902 | C – 7 |
| D903 | C – 7 |

| SYMBOL NO. | ADDRESS |
|---|---|
| D904 | C – 6 |
| D905 | C – 6 |
| D906 | C – 7 |
| D907 | C – 7 |
| D908 | C – 6 |
| D909 | D – 6 |
| D910 | D – 6 |
| D911 | D – 6 |
| D920 | D – 6 |
| D921 | D – 6 |
| D922 | E – 7 |
| D2A0 | C – 4 |
| D2A1 | B – 6 |
| D2A2 | C – 5 |
| D2A3 | A – 4 |
| D2A4 | A – 3 |
| D2G0 | B – 6 |
| D2G1 | A – 4 |
| D2G2 | B – 5 |
| D2G3 | A – 4 |
| D2G4 | A – 5 |
| D2G8 | B – 4 |
| D4A0 | E – 5 |
| D4A1 | D – 5 |
| D4A2 | E – 4 |
| D5A1 | E – 3 |
| D5A4 | B – 2 |
| D5A5 | D – 5 |
| D5A7 | C – 5 |
| D5A8 | C – 5 |
| D5A9 | A – 3 |
| D5B1 | D – 4 |
| D5B2 | E – 2 |
| D5B3 | C – 4 |
| D5B4 | B – 5 |
| D5G2 | D – 5 |
| | |
| F901 | A – 7 |
| F902 | B – 7 |
| F903 | B – 7 |
| | |
| FC11 | A – 7 |
| FC12 | A – 7 |
| FC21 | B – 7 |
| FC22 | B – 7 |
| FC31 | B – 7 |
| FC32 | B – 7 |
| | |
| IC101 | A – 1 |
| IC102 | B – 1 |
| IC103 | B – 1 |
| IC501 | A – 3 |
| IC551 | B – 3 |
| IC1S1 | A – 2 |
| IC2A0 | A – 4 |
| IC2A1 | A – 5 |
| IC4A0 | E – 5 |
| IC4A1 | E – 5 |
| IC5A0 | D – 2 |
| IC5A1 | E – 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| IC5A2 | E – 1 |
| IC5A4 | C – 2 |
| IC5A5 | E – 1 |
| | |
| J997 | C – 5 |
| J998 | C – 4 |
| J999 | B – 3 |
| J2A0 | A – 3 |
| J2A1 | A – 3 |
| J5A0 | A – 3 |
| J5A1 | A – 2 |
| | |
| L101 | A – 1 |
| L101 | A – 2 |
| L102 | A – 1 |
| L103 | A – 1 |
| L104 | A – 1 |
| L105 | A – 1 |
| L106 | A – 2 |
| L107 | B – 2 |
| L108 | B – 2 |
| L109 | A – 2 |
| L112 | B – 1 |
| L113 | B – 1 |
| L501 | A – 4 |
| L502 | B – 3 |
| L503 | B – 3 |
| L504 | B – 3 |
| L551 | B – 2 |
| L901 | A – 6 |
| L1S1 | A – 2 |
| L2A0 | B – 5 |
| L2A1 | B – 5 |
| L2A2 | B – 5 |
| L2A3 | B – 5 |
| L2A4 | B – 4 |
| L2A6 | A – 3 |
| L2G0 | B – 5 |
| L2G1 | A – 4 |
| L2G4 | A – 5 |
| L2G5 | B – 4 |
| L2G6 | B – 4 |
| L2T0 | A – 5 |
| L2T1 | A – 6 |
| L2T2 | A – 6 |
| L4A7 | E – 6 |
| L4A8 | E – 6 |
| | |
| P5A0 | C – 1 |
| | |
| Q01 | C – 1 |
| Q101 | A – 1 |
| Q102 | B – 2 |
| Q103 | B – 2 |
| Q106 | B – 1 |
| Q107 | B – 2 |
| Q108 | A – 2 |
| Q109 | A – 2 |
| Q110 | A – 2 |
| Q111 | B – 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q501 | B – 3 |
| Q503 | B – 3 |
| Q504 | B – 3 |
| Q505 | B – 3 |
| Q506 | C – 4 |
| Q507 | C – 5 |
| Q901 | D – 6 |
| Q902 | D – 7 |
| Q903 | D – 7 |
| Q904 | D – 7 |
| Q907 | D – 6 |
| Q908 | D – 6 |
| Q910 | E – 7 |
| Q911 | E – 7 |
| Q912 | E – 7 |
| Q913 | E – 7 |
| Q2A0 | B – 5 |
| Q2A1 | B – 5 |
| Q2A2 | C – 4 |
| Q2A3 | B – 5 |
| Q2A4 | A – 4 |
| Q2A5 | B – 4 |
| Q2A7 | A – 3 |
| Q2A8 | B – 3 |
| Q2A9 | A – 2 |
| Q2G0 | A – 5 |
| Q2G1 | A – 4 |
| Q2G2 | B – 4 |
| Q2G4 | B – 5 |
| Q2G5 | A – 4 |
| Q2G6 | A – 4 |
| Q2G7 | B – 5 |
| Q2G8 | A – 4 |
| Q2G9 | B – 5 |
| Q2H0 | B – 4 |
| Q2H1 | B – 4 |
| Q2R0 | A – 3 |
| Q2R1 | A – 4 |
| Q4A1 | D – 4 |
| Q4A2 | D – 5 |
| Q4A3 | D – 5 |
| Q4A4 | D – 5 |
| Q4A5 | E – 4 |
| Q4A6 | E – 6 |
| Q4C8 | E – 6 |
| Q5A1 | E – 3 |
| Q5A2 | E – 3 |
| Q5A3 | E – 3 |
| Q5A6 | D – 2 |
| Q5A7 | E – 7 |
| Q5A8 | D – 1 |
| Q5A9 | E – 7 |
| Q5B0 | E – 1 |
| Q5B1 | E – 2 |
| Q5B2 | C – 2 |
| Q5B3 | D – 2 |
| Q5B4 | B – 5 |
| Q5B6 | C – 4 |
| Q5B7 | C – 2 |
| Q5B8 | D – 3 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q5C4 | D – 2 |
| Q5C5 | D – 2 |
| Q5D6 | C – 4 |
| Q5E1 | D – 1 |
| Q5E2 | D – 6 |
| Q5E3 | E – 5 |
| Q5E4 | E – 3 |
| Q5F0 | C – 4 |
| Q5F1 | C – 4 |
| | |
| R01 | B – 1 |
| R03 | B – 1 |
| R04 | B – 1 |
| R05 | C – 1 |
| R06 | B – 1 |
| R08 | B – 1 |
| R09 | B – 1 |
| R10 | C – 2 |
| R11 | B – 1 |
| R12 | B – 1 |
| R13 | B – 1 |
| R14 | B – 1 |
| R15 | B – 1 |
| R16 | B – 1 |
| R17 | B – 1 |
| R18 | A – 2 |
| R20 | C – 1 |
| R102 | A – 1 |
| R103 | A – 1 |
| R104 | A – 1 |
| R105 | A – 1 |
| R108 | B – 1 |
| R109 | B – 1 |
| R110 | B – 2 |
| R111 | A – 1 |
| R112 | A – 2 |
| R113 | A – 2 |
| R114 | B – 2 |
| R115 | B – 2 |
| R116 | B – 2 |
| R117 | B – 2 |
| R118 | A – 2 |
| R119 | A – 2 |
| R120 | B – 2 |
| R127 | A – 2 |
| R128 | B – 2 |
| R129 | B – 1 |
| R130 | B – 1 |
| R131 | B – 1 |
| R132 | B – 1 |
| R133 | B – 1 |
| R134 | B – 1 |
| R135 | B – 1 |
| R136 | B – 1 |
| R142 | A – 2 |
| R143 | A – 2 |
| R144 | A – 2 |
| R145 | A – 2 |
| R146 | A – 2 |
| R147 | A – 2 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R150 | B – 1 |
| R151 | B – 1 |
| R152 | B – 1 |
| R153 | B – 1 |
| R154 | B – 1 |
| R160 | A – 2 |
| R161 | A – 2 |
| R199 | B – 1 |
| R204 | B – 5 |
| R206 | B – 5 |
| R501 | A – 3 |
| R502 | B – 3 |
| R503 | B – 3 |
| R504 | B – 3 |
| R505 | B – 3 |
| R506 | B – 3 |
| R507 | B – 3 |
| R508 | B – 3 |
| R509 | B – 3 |
| R510 | B – 3 |
| R511 | A – 3 |
| R512 | B – 3 |
| R513 | B – 3 |
| R514 | B – 3 |
| R515 | B – 3 |
| R516 | C – 4 |
| R517 | B – 4 |
| R518 | C – 5 |
| R519 | C – 5 |
| R520 | C – 5 |
| R521 | B – 5 |
| R522 | C – 5 |
| R523 | B – 5 |
| R551 | A – 3 |
| R552 | A – 3 |
| R553 | A – 3 |
| R554 | B – 3 |
| R555 | B – 3 |
| R556 | A – 3 |
| R557 | B – 3 |
| R901 | A – 6 |
| R903 | D – 6 |
| R904 | D – 6 |
| R911 | C – 6 |
| R913 | D – 6 |
| R914 | D – 6 |
| R915 | D – 6 |
| R916 | D – 7 |
| R917 | D – 7 |
| R920 | E – 7 |
| R921 | E – 6 |
| R922 | E – 7 |
| R923 | E – 7 |
| R924 | E – 7 |
| R1S1 | A – 2 |
| R1S2 | A – 2 |
| R2A0 | B – 5 |
| R2A1 | B – 5 |
| R2A2 | B – 5 |
| R2A3 | B – 5 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R2A4 | B – 5 |
| R2A5 | B – 5 |
| R2A6 | B – 5 |
| R2A8 | B – 5 |
| R2A9 | B – 5 |
| R2B3 | B – 5 |
| R2B4 | B – 6 |
| R2B5 | A – 4 |
| R2B6 | A – 4 |
| R2B7 | A – 4 |
| R2B8 | A – 4 |
| R2B9 | B – 4 |
| R2C0 | B – 4 |
| R2C1 | B – 4 |
| R2C2 | B – 4 |
| R2C3 | B – 5 |
| R2C4 | B – 5 |
| R2C5 | B – 3 |
| R2C6 | B – 3 |
| R2C7 | B – 5 |
| R2C8 | B – 5 |
| R2C9 | A – 2 |
| R2D1 | C – 4 |
| R2D2 | B – 4 |
| R2G1 | B – 5 |
| R2G2 | B – 5 |
| R2G3 | B – 5 |
| R2G5 | B – 5 |
| R2G7 | B – 5 |
| R2G8 | A – 4 |
| R2G9 | A – 5 |
| R2H0 | A – 4 |
| R2H1 | A – 5 |
| R2H3 | B – 4 |
| R2H4 | B – 5 |
| R2H5 | B – 4 |
| R2H6 | B – 4 |
| R2H7 | B – 4 |
| R2H9 | A – 4 |
| R2J0 | B – 4 |
| R2J1 | B – 5 |
| R2J3 | B – 4 |
| R2J4 | B – 4 |
| R2J5 | C – 6 |
| R2J6 | C – 6 |
| R2K0 | A – 4 |
| R2K2 | A – 4 |
| R2K3 | A – 4 |
| R2K7 | A – 2 |
| R2K8 | A – 2 |
| R2K9 | A – 2 |
| R2L0 | A – 5 |
| R2L1 | A – 5 |
| R2L2 | A – 6 |
| R2M2 | A – 4 |
| R2P1 | B – 6 |
| R2R0 | A – 3 |
| R2R1 | A – 3 |
| R2R2 | A – 3 |
| R2R3 | A – 4 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R2T0 | B – 5 |
| R2X0 | A – 3 |
| R2X1 | A – 3 |
| R2X2 | A – 4 |
| R2X3 | A – 3 |
| R2Y0 | A – 5 |
| R2Y1 | A – 4 |
| R2Y2 | A – 3 |
| R4A0 | D – 4 |
| R4A1 | D – 4 |
| R4A2 | D – 5 |
| R4A3 | E – 5 |
| R4A4 | E – 5 |
| R4A5 | D – 5 |
| R4A6 | D – 4 |
| R4A7 | D – 4 |
| R4A8 | D – 5 |
| R4A9 | E – 5 |
| R4B0 | E – 5 |
| R4B1 | E – 4 |
| R4B2 | E – 5 |
| R4B3 | D – 4 |
| R4B4 | D – 4 |
| R4B5 | E – 4 |
| R4B6 | E – 4 |
| R4B7 | D – 5 |
| R4B8 | D – 5 |
| R4B9 | D – 5 |
| R4C0 | D – 5 |
| R4C1 | D – 6 |
| R4C2 | D – 5 |
| R4C3 | D – 5 |
| R4C4 | D – 5 |
| R4C5 | D – 5 |
| R4C6 | D – 5 |
| R4C7 | D – 5 |
| R4C8 | D – 5 |
| R4C9 | D – 5 |
| R4D0 | E – 6 |
| R4D1 | E – 5 |
| R4D2 | E – 5 |
| R4D3 | D – 5 |
| R4D4 | D – 5 |
| R4D5 | D – 5 |
| R4D6 | E – 5 |
| R4D7 | E – 5 |
| R4D8 | E – 5 |
| R4D9 | D – 6 |
| R4E0 | D – 6 |
| R4E1 | E – 6 |
| R4E5 | E – 4 |
| R4S1 | D – 6 |
| R4S5 | E – 6 |
| R4S6 | E – 6 |
| R4S7 | E – 6 |
| R4S9 | E – 6 |
| R5A0 | E – 1 |
| R5A1 | E – 1 |
| R5A2 | E – 1 |
| R5A3 | E – 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R5A4 | D – 3 |
| R5A5 | D – 3 |
| R5A6 | D – 1 |
| R5A7 | D – 6 |
| R5A8 | D – 1 |
| R5A9 | E – 4 |
| R5B0 | D – 1 |
| R5B1 | E – 3 |
| R5B2 | D – 6 |
| R5B3 | E – 3 |
| R5B4 | E – 3 |
| R5B5 | E – 1 |
| R5B6 | E – 1 |
| R5B7 | E – 4 |
| R5B8 | E – 4 |
| R5B9 | E – 4 |
| R5C0 | E – 3 |
| R5C1 | E – 3 |
| R5C2 | E – 3 |
| R5C3 | E – 3 |
| R5C4 | E – 3 |
| R5C5 | E – 3 |
| R5C6 | D – 3 |
| R5C7 | C – 1 |
| R5C8 | D – 2 |
| R5C9 | D – 3 |
| R5D6 | E – 7 |
| R5D7 | E – 7 |
| R5E0 | D – 1 |
| R5E1 | D – 2 |
| R5E2 | D – 2 |
| R5E3 | D – 2 |
| R5E4 | D – 2 |
| R5E5 | D – 2 |
| R5E6 | D – 2 |
| R5E7 | D – 2 |
| R5E8 | E – 3 |
| R5E9 | E – 3 |
| R5F0 | E – 2 |
| R5F1 | E – 2 |
| R5F2 | B – 5 |
| R5F3 | D – 1 |
| R5F4 | B – 5 |
| R5F5 | C – 4 |
| R5F6 | C – 3 |
| R5F7 | E – 1 |
| R5F8 | D – 3 |
| R5G0 | D – 1 |
| R5G2 | E – 1 |
| R5G3 | E – 1 |
| R5G4 | D – 1 |
| R5G5 | C – 5 |
| R5G6 | D – 6 |
| R5G7 | C – 2 |
| R5G8 | C – 2 |
| R5G9 | C – 2 |
| R5H0 | C – 2 |
| R5H1 | C – 2 |
| R5H2 | C – 2 |
| R5H3 | C – 2 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R5H4 | C – 2 |
| R5H5 | D – 5 |
| R5H6 | D – 5 |
| R5H7 | D – 4 |
| R5H9 | C – 2 |
| R5J0 | A – 3 |
| R5J1 | A – 3 |
| R5J2 | E – 2 |
| R5J3 | D – 3 |
| R5J4 | D – 2 |
| R5J6 | C – 3 |
| R5J7 | B – 4 |
| R5K0 | A – 3 |
| R5K1 | B – 2 |
| R5K4 | D – 2 |
| R5K5 | E – 1 |
| R5K7 | D – 3 |
| R5L1 | D – 1 |
| R5L2 | D – 1 |
| R5L5 | C – 1 |
| R5M0 | D – 3 |
| R5M1 | D – 3 |
| | |
| RJ101 | A – 2 |
| RJ102 | A – 2 |
| RJ104 | A – 1 |
| RJ105 | B – 1 |
| RJ106 | C – 1 |
| RJ107 | B – 1 |
| RJ108 | B – 2 |
| RJ202 | A – 4 |
| RJ203 | A – 4 |
| RJ204 | A – 3 |
| RJ205 | A – 3 |
| RJ206 | A – 3 |
| RJ207 | B – 3 |
| RJ208 | A – 3 |
| RJ209 | B – 5 |
| RJ210 | A – 4 |
| RJ211 | B – 5 |
| RJ212 | B – 5 |
| RJ213 | C – 5 |
| RJ214 | D – 3 |
| RJ215 | C – 3 |
| RJ401 | D – 5 |
| RJ402 | D – 6 |
| RJ403 | D – 5 |
| RJ404 | E – 5 |
| RJ405 | E – 5 |
| RJ406 | D – 5 |
| RJ407 | D – 4 |
| RJ408 | E – 5 |
| RJ501 | B – 4 |
| RJ502 | C – 4 |
| RJ503 | C – 4 |
| RJ504 | C – 3 |
| RJ505 | D – 1 |
| | |
| S101 | A – 2 |
| S5A0 | E – 6 |

| ADDRESS |
|---|
| E - 5 |
| E - 5 |
| E - 5 |
| D - 6 |
| E - 5 |
| E - 5 |
| E - 6 |
| E - 5 |
| E - 6 |
| E - 6 |
| E - 6 |
| E - 7 |
| E - 1 |
| E - 5 |
| D - 1 |
| E - 1 |
| E - 3 |
| E - 3 |
| E - 3 |
| D - 2 |
| E - 3 |
| D - 2 |
| D - 1 |
| C - 2 |
| C - 2 |
| B - 5 |
| D - 2 |
| C - 2 |
| C - 2 |
| C - 2 |
| C - 2 |
| E - 1 |
| A - 3 |
| D - 3 |
| D - 1 |
| E - 6 |
| D - 5 |
| D - 2 |
| C - 4 |
| D - 2 |
|  |
| A - 2 |
| A - 2 |
| B - 1 |
| A - 1 |
| A - 1 |
| A - 2 |
|  |
| A - 2 |
|  |
| B - 2 |
| B - 1 |
| B - 2 |
| B - 2 |
| A - 3 |
| B - 3 |
| C - 4 |
| C - 6 |
| C - 7 |
| C - 7 |

| SYMBOL NO. | ADDRESS |
|---|---|
| D904 | C - 6 |
| D905 | C - 6 |
| D906 | C - 7 |
| D907 | C - 7 |
| D908 | C - 6 |
| D909 | D - 6 |
| D910 | D - 6 |
| D911 | D - 6 |
| D920 | D - 6 |
| D921 | D - 6 |
| D922 | E - 7 |
| D2A0 | C - 4 |
| D2A1 | B - 6 |
| D2A2 | C - 5 |
| D2A3 | A - 4 |
| D2A4 | A - 3 |
| D2G0 | B - 6 |
| D2G1 | A - 4 |
| D2G2 | B - 5 |
| D2G3 | A - 4 |
| D2G4 | A - 5 |
| D2G8 | B - 4 |
| D4A0 | E - 5 |
| D4A1 | D - 5 |
| D4A2 | E - 4 |
| D5A1 | E - 3 |
| D5A4 | B - 2 |
| D5A5 | D - 5 |
| D5A7 | C - 5 |
| D5A8 | C - 5 |
| D5A9 | A - 3 |
| D5B1 | D - 4 |
| D5B2 | E - 2 |
| D5B3 | C - 4 |
| D5B4 | B - 5 |
| D5G2 | D - 5 |
|  |  |
| F901 | A - 7 |
| F902 | B - 7 |
| F903 | B - 7 |
|  |  |
| FC11 | A - 7 |
| FC12 | A - 7 |
| FC21 | B - 7 |
| FC22 | B - 7 |
| FC31 | B - 7 |
| FC32 | B - 7 |
|  |  |
| IC101 | A - 1 |
| IC102 | B - 1 |
| IC103 | B - 1 |
| IC501 | A - 3 |
| IC551 | B - 3 |
| IC1S1 | A - 2 |
| IC2A0 | A - 4 |
| IC2A1 | A - 5 |
| IC4A0 | E - 5 |
| IC4A1 | E - 5 |
| IC5A0 | D - 2 |
| IC5A1 | E - 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| IC5A2 | E - 1 |
| IC5A4 | C - 2 |
| IC5A5 | E - 1 |
|  |  |
| J997 | C - 5 |
| J998 | C - 4 |
| J999 | B - 3 |
| J2A0 | A - 3 |
| J2A1 | A - 3 |
| J5A0 | A - 3 |
| J5A1 | A - 2 |
|  |  |
| L101 | A - 1 |
| L101 | A - 2 |
| L102 | A - 1 |
| L103 | A - 1 |
| L104 | A - 1 |
| L105 | A - 1 |
| L106 | A - 2 |
| L107 | B - 2 |
| L108 | B - 2 |
| L109 | A - 2 |
| L112 | B - 1 |
| L113 | B - 1 |
| L501 | A - 4 |
| L502 | B - 3 |
| L503 | B - 3 |
| L504 | B - 3 |
| L551 | B - 2 |
| L901 | A - 6 |
| L1S1 | A - 2 |
| L2A0 | B - 5 |
| L2A1 | B - 5 |
| L2A2 | B - 5 |
| L2A3 | B - 5 |
| L2A4 | B - 4 |
| L2A6 | A - 3 |
| L2G0 | B - 5 |
| L2G1 | A - 4 |
| L2G4 | A - 5 |
| L2G5 | B - 4 |
| L2G6 | B - 4 |
| L2T0 | A - 5 |
| L2T1 | A - 6 |
| L2T2 | A - 6 |
| L4A7 | E - 6 |
| L4A8 | E - 6 |
|  |  |
| P5A0 | C - 1 |
|  |  |
| Q01 | C - 1 |
| Q101 | A - 1 |
| Q102 | B - 2 |
| Q103 | B - 2 |
| Q106 | B - 1 |
| Q107 | B - 2 |
| Q108 | A - 2 |
| Q109 | A - 2 |
| Q110 | A - 2 |
| Q111 | B - 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q501 | B - 3 |
| Q503 | B - 3 |
| Q504 | B - 3 |
| Q505 | B - 3 |
| Q506 | C - 4 |
| Q507 | C - 5 |
| Q901 | D - 6 |
| Q902 | D - 7 |
| Q903 | D - 7 |
| Q904 | D - 7 |
| Q907 | D - 6 |
| Q908 | D - 6 |
| Q910 | E - 7 |
| Q911 | E - 7 |
| Q912 | E - 7 |
| Q913 | E - 7 |
| Q2A0 | B - 5 |
| Q2A1 | B - 5 |
| Q2A2 | C - 4 |
| Q2A3 | B - 5 |
| Q2A4 | A - 4 |
| Q2A5 | B - 4 |
| Q2A7 | A - 3 |
| Q2A8 | B - 3 |
| Q2A9 | A - 2 |
| Q2G0 | A - 5 |
| Q2G1 | A - 4 |
| Q2G2 | B - 4 |
| Q2G4 | B - 5 |
| Q2G5 | A - 4 |
| Q2G6 | A - 4 |
| Q2G7 | B - 5 |
| Q2G8 | A - 4 |
| Q2G9 | B - 5 |
| Q2H0 | B - 4 |
| Q2H1 | B - 4 |
| Q2R0 | A - 3 |
| Q2R1 | A - 4 |
| Q4A1 | D - 4 |
| Q4A2 | D - 5 |
| Q4A3 | D - 5 |
| Q4A4 | D - 5 |
| Q4A5 | E - 4 |
| Q4A6 | E - 6 |
| Q4C8 | E - 6 |
| Q5A1 | E - 3 |
| Q5A2 | E - 3 |
| Q5A3 | E - 3 |
| Q5A6 | D - 2 |
| Q5A7 | E - 7 |
| Q5A8 | D - 1 |
| Q5A9 | E - 7 |
| Q5B0 | E - 1 |
| Q5B1 | E - 2 |
| Q5B2 | C - 2 |
| Q5B3 | D - 2 |
| Q5B4 | B - 5 |
| Q5B6 | C - 4 |
| Q5B7 | C - 2 |
| Q5B8 | D - 3 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q5C4 | D - 2 |
| Q5C5 | D - 2 |
| Q5D6 | C - 4 |
| Q5E1 | D - 1 |
| Q5E2 | D - 6 |
| Q5E3 | E - 5 |
| Q5E4 | E - 3 |
| Q5F0 | C - 4 |
| Q5F1 | C - 4 |
|  |  |
| R01 | B - 1 |
| R03 | B - 1 |
| R04 | B - 1 |
| R05 | C - 1 |
| R06 | B - 1 |
| R08 | B - 1 |
| R09 | B - 1 |
| R10 | C - 2 |
| R11 | B - 1 |
| R12 | B - 1 |
| R13 | B - 1 |
| R14 | B - 1 |
| R15 | B - 1 |
| R16 | B - 1 |
| R17 | B - 1 |
| R18 | A - 2 |
| R20 | C - 1 |
| R102 | A - 1 |
| R103 | A - 1 |
| R104 | A - 1 |
| R105 | A - 1 |
| R108 | B - 1 |
| R109 | B - 1 |
| R110 | B - 2 |
| R111 | A - 1 |
| R112 | A - 2 |
| R113 | A - 2 |
| R114 | B - 2 |
| R115 | B - 2 |
| R116 | B - 2 |
| R117 | B - 2 |
| R118 | A - 2 |
| R119 | A - 2 |
| R120 | B - 2 |
| R127 | A - 2 |
| R128 | B - 2 |
| R129 | B - 1 |
| R130 | B - 1 |
| R131 | B - 1 |
| R132 | B - 1 |
| R133 | B - 1 |
| R134 | B - 1 |
| R135 | B - 1 |
| R136 | B - 1 |
| R142 | A - 2 |
| R143 | A - 2 |
| R144 | A - 2 |
| R145 | A - 2 |
| R146 | A - 2 |
| R147 | A - 2 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R150 | B - 1 |
| R151 | B - 1 |
| R152 | B - 1 |
| R153 | B - 1 |
| R154 | B - 1 |
| R160 | A - 2 |
| R161 | A - 2 |
| R199 | B - 1 |
| R204 | B - 5 |
| R206 | B - 5 |
| R501 | A - 3 |
| R502 | B - 3 |
| R503 | B - 3 |
| R504 | B - 3 |
| R505 | B - 3 |
| R506 | B - 3 |
| R507 | B - 3 |
| R508 | B - 3 |
| R509 | B - 3 |
| R510 | B - 3 |
| R511 | A - 3 |
| R512 | B - 3 |
| R513 | B - 3 |
| R514 | B - 3 |
| R515 | B - 3 |
| R516 | C - 4 |
| R517 | B - 4 |
| R518 | C - 5 |
| R519 | C - 5 |
| R520 | C - 5 |
| R521 | B - 5 |
| R522 | C - 5 |
| R523 | B - 5 |
| R551 | A - 3 |
| R552 | A - 3 |
| R553 | A - 3 |
| R554 | B - 3 |
| R555 | B - 3 |
| R556 | A - 3 |
| R557 | B - 3 |
| R901 | A - 6 |
| R903 | D - 6 |
| R904 | D - 6 |
| R911 | C - 6 |
| R913 | D - 6 |
| R914 | D - 6 |
| R915 | D - 6 |
| R916 | D - 7 |
| R917 | D - 7 |
| R920 | E - 7 |
| R921 | E - 6 |
| R922 | E - 7 |
| R923 | E - 7 |
| R924 | E - 7 |
| R1S1 | A - 2 |
| R1S2 | A - 2 |
| R2A0 | B - 5 |
| R2A1 | B - 5 |
| R2A2 | B - 5 |
| R2A3 | B - 5 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R2A4 | B - 5 |
| R2A5 | B - 5 |
| R2A6 | B - 5 |
| R2A8 | B - 5 |
| R2A9 | B - 5 |
| R2B3 | B - 5 |
| R2B4 | B - 6 |
| R2B5 | A - 4 |
| R2B6 | A - 4 |
| R2B7 | A - 4 |
| R2B8 | A - 4 |
| R2B9 | B - 4 |
| R2C0 | B - 4 |
| R2C1 | B - 4 |
| R2C2 | B - 4 |
| R2C3 | B - 5 |
| R2C4 | B - 5 |
| R2C5 | B - 3 |
| R2C6 | B - 3 |
| R2C7 | B - 5 |
| R2C8 | B - 5 |
| R2C9 | A - 2 |
| R2D1 | C - 4 |
| R2D2 | B - 4 |
| R2G1 | B - 5 |
| R2G2 | B - 5 |
| R2G3 | B - 5 |
| R2G5 | B - 5 |
| R2G7 | B - 5 |
| R2G8 | A - 4 |
| R2G9 | A - 5 |
| R2H0 | A - 4 |
| R2H1 | A - 5 |
| R2H3 | B - 4 |
| R2H4 | B - 5 |
| R2H5 | B - 4 |
| R2H6 | B - 4 |
| R2H7 | B - 4 |
| R2H9 | A - 4 |
| R2J0 | B - 4 |
| R2J1 | B - 5 |
| R2J3 | B - 4 |
| R2J4 | B - 4 |
| R2J5 | C - 6 |
| R2J6 | C - 6 |
| R2K0 | A - 4 |
| R2K2 | A - 4 |
| R2K3 | A - 4 |
| R2K7 | A - 2 |
| R2K8 | A - 2 |
| R2K9 | A - 2 |
| R2L0 | A - 5 |
| R2L1 | A - 5 |
| R2L2 | A - 6 |
| R2M2 | A - 4 |
| R2P1 | B - 6 |
| R2R0 | A - 3 |
| R2R1 | A - 3 |
| R2R2 | A - 3 |
| R2R3 | A - 4 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R2T0 | B - 5 |
| R2X0 | A - 3 |
| R2X1 | A - 3 |
| R2X2 | A - 4 |
| R2X3 | A - 3 |
| R2Y0 | A - 5 |
| R2Y1 | A - 4 |
| R2Y2 | A - 3 |
| R4A0 | D - 4 |
| R4A1 | D - 4 |
| R4A2 | D - 5 |
| R4A3 | E - 5 |
| R4A4 | E - 5 |
| R4A5 | D - 5 |
| R4A6 | D - 4 |
| R4A7 | D - 4 |
| R4A8 | D - 5 |
| R4A9 | E - 5 |
| R4B0 | E - 5 |
| R4B1 | E - 4 |
| R4B2 | E - 5 |
| R4B3 | D - 4 |
| R4B4 | D - 4 |
| R4B5 | E - 4 |
| R4B6 | E - 4 |
| R4B7 | D - 5 |
| R4B8 | D - 5 |
| R4B9 | D - 5 |
| R4C0 | D - 5 |
| R4C1 | D - 6 |
| R4C2 | D - 5 |
| R4C3 | D - 5 |
| R4C4 | D - 5 |
| R4C5 | D - 5 |
| R4C6 | D - 5 |
| R4C7 | D - 5 |
| R4C8 | D - 5 |
| R4C9 | D - 5 |
| R4D0 | E - 6 |
| R4D1 | E - 5 |
| R4D2 | E - 5 |
| R4D3 | D - 5 |
| R4D4 | D - 5 |
| R4D5 | D - 5 |
| R4D6 | E - 5 |
| R4D7 | E - 5 |
| R4D8 | E - 5 |
| R4D9 | D - 6 |
| R4E0 | D - 6 |
| R4E1 | E - 6 |
| R4E5 | E - 4 |
| R4S1 | D - 6 |
| R4S5 | E - 6 |
| R4S6 | E - 6 |
| R4S7 | E - 6 |
| R4S9 | E - 6 |
| R5A0 | E - 1 |
| R5A1 | E - 1 |
| R5A2 | E - 1 |
| R5A3 | E - 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R5A4 | D - 3 |
| R5A5 | D - 3 |
| R5A6 | D - 1 |
| R5A7 | D - 6 |
| R5A8 | D - 1 |
| R5A9 | E - 4 |
| R5B0 | D - 1 |
| R5B1 | E - 3 |
| R5B2 | D - 6 |
| R5B3 | E - 3 |
| R5B4 | E - 3 |
| R5B5 | E - 1 |
| R5B6 | E - 1 |
| R5B7 | E - 4 |
| R5B8 | E - 4 |
| R5B9 | E - 4 |
| R5C0 | E - 3 |
| R5C1 | E - 3 |
| R5C2 | E - 3 |
| R5C3 | E - 3 |
| R5C4 | E - 3 |
| R5C5 | E - 3 |
| R5C6 | D - 3 |
| R5C7 | C - 1 |
| R5C8 | D - 2 |
| R5C9 | D - 3 |
| R5D6 | E - 7 |
| R5D7 | E - 7 |
| R5E0 | D - 1 |
| R5E1 | D - 2 |
| R5E2 | D - 2 |
| R5E3 | D - 2 |
| R5E4 | D - 2 |
| R5E5 | D - 2 |
| R5E6 | D - 2 |
| R5E7 | D - 2 |
| R5E8 | E - 3 |
| R5E9 | E - 3 |
| R5F0 | E - 2 |
| R5F1 | E - 2 |
| R5F2 | B - 5 |
| R5F3 | D - 1 |
| R5F4 | B - 5 |
| R5F5 | C - 4 |
| R5F6 | C - 3 |
| R5F7 | E - 1 |
| R5F8 | D - 3 |
| R5G0 | D - 1 |
| R5G2 | E - 1 |
| R5G3 | E - 1 |
| R5G4 | D - 1 |
| R5G5 | C - 5 |
| R5G6 | D - 6 |
| R5G7 | C - 2 |
| R5G8 | C - 2 |
| R5G9 | C - 2 |
| R5H0 | C - 2 |
| R5H1 | C - 2 |
| R5H2 | C - 2 |
| R5H3 | C - 2 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R5H4 | C - 2 |
| R5H5 | D - 5 |
| R5H6 | D - 5 |
| R5H7 | D - 4 |
| R5H9 | C - 2 |
| R5J0 | A - 3 |
| R5J1 | A - 3 |
| R5J2 | E - 2 |
| R5J3 | D - 3 |
| R5J4 | D - 2 |
| R5J6 | C - 3 |
| R5J7 | B - 4 |
| R5K0 | A - 3 |
| R5K1 | B - 2 |
| R5K4 | D - 2 |
| R5K5 | E - 1 |
| R5K7 | D - 3 |
| R5L1 | D - 1 |
| R5L2 | D - 1 |
| R5L5 | C - 1 |
| R5M0 | D - 3 |
| R5M1 | D - 3 |
|  |  |
| RJ101 | A - 2 |
| RJ102 | A - 2 |
| RJ104 | A - 1 |
| RJ105 | B - 1 |
| RJ106 | C - 1 |
| RJ107 | B - 1 |
| RJ108 | B - 2 |
| RJ202 | A - 4 |
| RJ203 | A - 4 |
| RJ204 | A - 3 |
| RJ205 | A - 3 |
| RJ206 | A - 3 |
| RJ207 | B - 3 |
| RJ208 | A - 3 |
| RJ209 | B - 5 |
| RJ210 | A - 4 |
| RJ211 | B - 5 |
| RJ212 | B - 5 |
| RJ213 | C - 5 |
| RJ214 | D - 3 |
| RJ215 | C - 3 |
| RJ401 | D - 5 |
| RJ402 | D - 6 |
| RJ403 | D - 5 |
| RJ404 | E - 5 |
| RJ405 | E - 5 |
| RJ406 | D - 5 |
| RJ407 | D - 4 |
| RJ408 | E - 5 |
| RJ501 | B - 4 |
| RJ502 | C - 4 |
| RJ503 | C - 4 |
| RJ504 | C - 3 |
| RJ505 | D - 1 |
|  |  |
| S101 | A - 2 |
| S5A0 | E - 6 |

| SYMBOL NO. | ADDRESS |
|---|---|
| S5A1 | A - 1 |
|  |  |
| SF101 | A - 1 |
| SF102 | A - 1 |
|  |  |
| T901 | B - 6 |
|  |  |
| TP01 | B - 1 |
| TP02 | B - 1 |
| TP04 | C - 2 |
| TP11 | A - 1 |
| TP12 | B - 2 |
| TP13 | B - 2 |
| TP14 | B - 2 |
| TP15 | A - 1 |
| TP16 | B - 2 |
| TP21 | A - 2 |
| TP53 | C - 4 |
| TP108 | E - 4 |
| TP109 | E - 4 |
| TP110 | E - 4 |
| TP1A | A - 1 |
| TP1C | A - 1 |
| TP1E | A - 1 |
| TP1S | A - 2 |
| TP1V | A - 2 |
| TP2A | B - 4 |
| TP2B | A - 5 |
| TP2H | B - 4 |
| TP2J | A - 2 |
| TP2M | B - 4 |
| TP2N | B - 4 |
| TP2S | B - 5 |
| TP5A | C - 1 |
| TP5B | D - 1 |
| TP5C | D - 1 |
| TP5D | C - 3 |
| TP5F | C - 2 |
| TP5X | D - 3 |
| TP5Y | D - 3 |
| TP9A | A - 3 |
| TP9C | C - 2 |
| TP1G1 | A - 1 |
| TP1G2 | A - 1 |
| TP1G3 | B - 1 |
| TP1G4 | B - 1 |
| TP2AH | B - 4 |
| TP2C4 | B - 4 |
| TP2C7 | B - 5 |
| TP2G2 | A - 3 |
| TP2G3 | A - 3 |
| TP2G4 | A - 4 |
| TP4C0 | D - 4 |
| TP4C1 | D - 5 |
| TP4C2 | D - 5 |
| TP4D1 | D - 5 |
| TP4D2 | D - 5 |
| TP4F1 | D - 5 |
| TP4G1 | D - 4 |
| TP4M1 | D - 5 |

| SYMBOL NO. | ADDRESS |
|---|---|
| TP5J0 | D - 3 |
| TP5J1 | E - 3 |
| TP5J2 | E - 1 |
| TP5J3 | E - 1 |
| TP5J4 | E - 1 |
| TP5J5 | E - 3 |
| TP5J6 | C - 5 |
| TP5J8 | E - 3 |
| TP5J9 | E - 4 |
| TP5K0 | C - 3 |
| TP5K1 | D - 3 |
| TP5K3 | E - 2 |
| TP5K4 | E - 6 |
| TP5K5 | D - 4 |
| TPGND | B - 4 |
| TPSYNC | C - 4 |
| TPRESET | A - 1 |
|  |  |
| TU01 | A - 1 |
|  |  |
| VR101 | B - 2 |
| VR5A0 | E - 1 |
|  |  |
| X501 | A - 3 |
| X2A0 | A - 4 |
| X4A0 | E - 6 |
| X5A0 | C - 2 |
| X5A1 | D - 2 |
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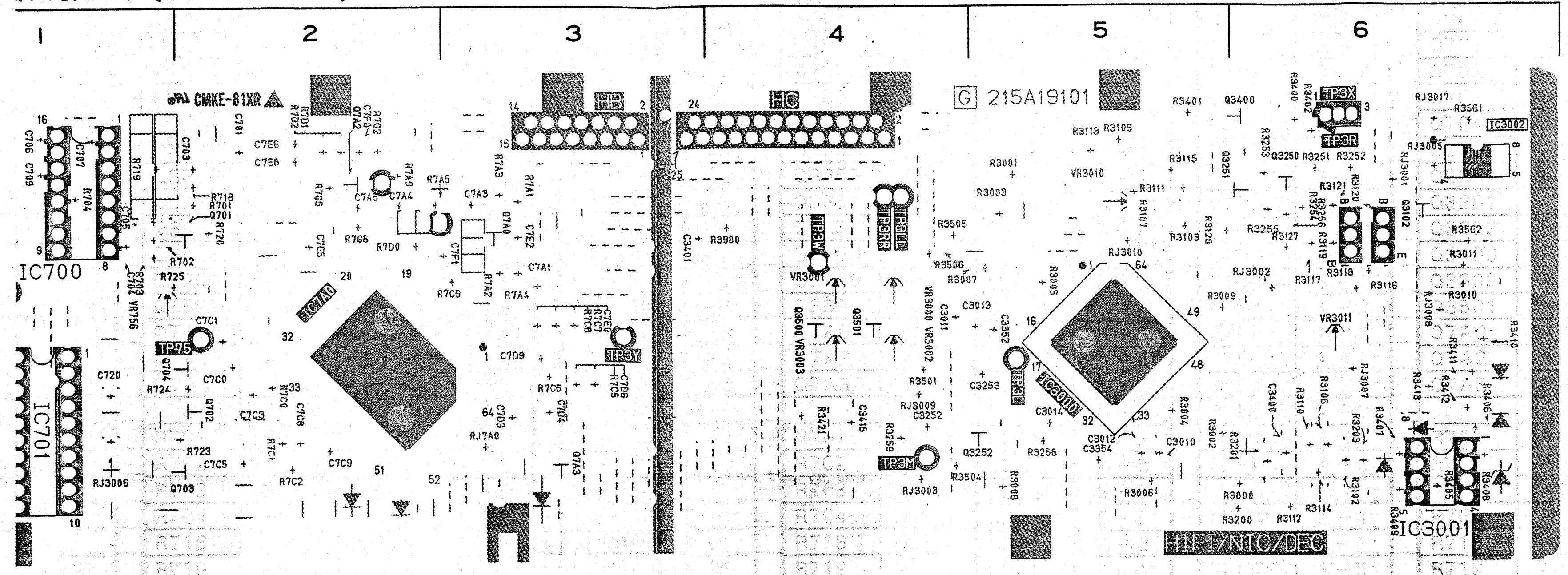
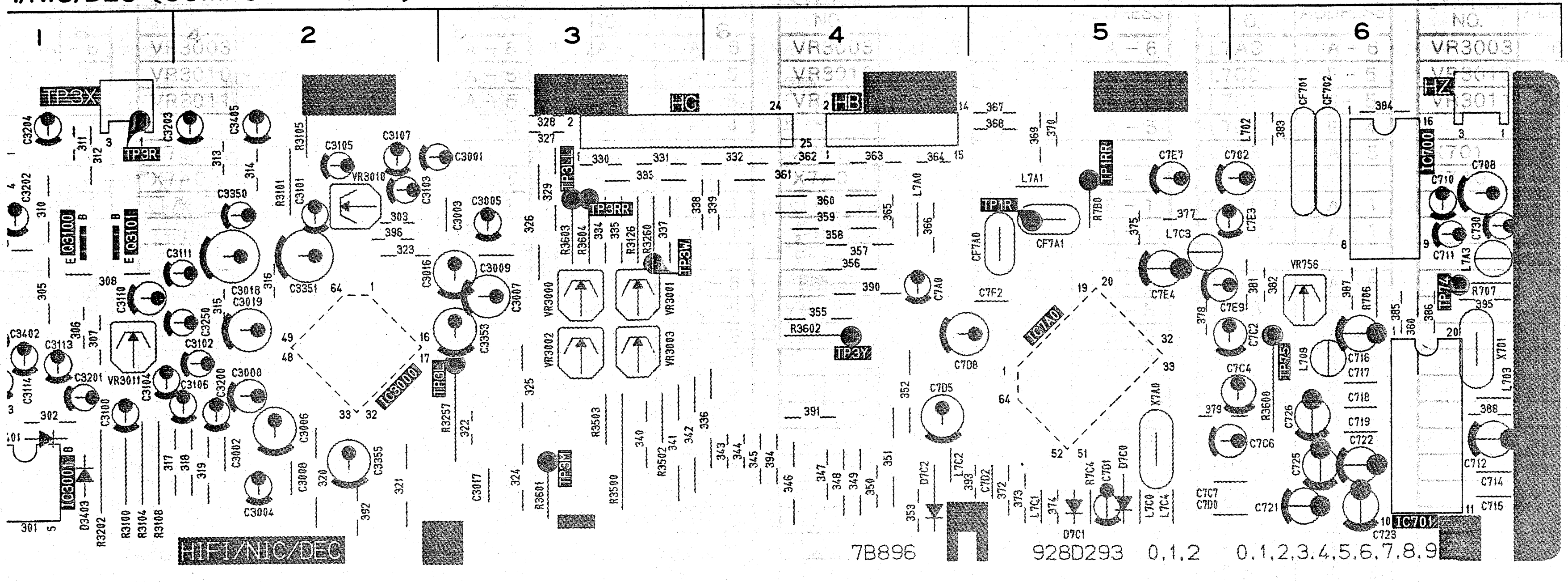
## I/NIC/DEC〔SOLDER SIDE〕


1
2
3
4
5
6
CMKE-81XR
215A19101
HB
HC
IC700
IC701
IC7A0
IC3000
IC3001
IC3002
TP75
TP3X
TP3R
TP3Y
TP3M
HIFI/NIC/DEC

## PCB-HIFI/NIC/DEC〔SOLDER SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS |
|---|---|---|---|---|---|---|---|---|---|
| C701 | A - 2 | C7C0 | B - 2 | Q701 | A - 2 | R3000 | B - 6 | R3118 | A - 6 |
| C703 | A - 2 | C7C1 | A - 2 | Q702 | B - 2 | R3001 | A - 5 | R3119 | A - 6 |
| C704 | A - 1 | C7C3 | B - 2 | Q703 | B - 2 | R3002 | B - 5 | R3120 | A - 6 |
| C705 | A - 1 | C7C5 | B - 2 | Q704 | B - 2 | R3003 | A - 5 | R3121 | A - 6 |
| C706 | A - 1 | C7C8 | B - 2 | Q3102 | A - 6 | R3004 | B - 5 | R3127 | A - 6 |
| C707 | A - 1 | C7C9 | B - 2 | Q3250 | A - 6 | R3005 | A - 5 | R3128 | A - 5 |
| C709 | A - 1 | C7D3 | B - 3 | Q3251 | A - 6 | R3006 | B - 5 | R3200 | B - 6 |
| C713 | B - 1 | C7D4 | B - 3 | Q3252 | B - 5 | R3007 | A - 5 | R3201 | B - 6 |
| C720 | B - 1 | C7D6 | B - 3 | Q3400 | A - 6 | R3008 | B - 5 | R3203 | B - 6 |
| C3010 | B - 5 | C7D9 | B - 3 | Q3500 | A - 4 | R3009 | A - 5 | R3251 | A - 6 |
| C3011 | A - 4 | C7E0 | A - 3 | Q3501 | A - 4 | R3010 | A - 6 | R3252 | A - 6 |
| C3012 | B - 5 | C7E2 | A - 3 | Q7A0 | A - 3 | R3011 | A - 6 | R3253 | A - 6 |
| C3013 | A - 5 | C7E5 | A - 2 | Q7A2 | A - 2 | R3102 | B - 6 | R3254 | A - 6 |
| C3014 | B - 5 | C7E6 | A - 2 | Q7A3 | B - 3 | R3103 | A - 5 | R3255 | A - 6 |
| C3252 | B - 4 | C7E8 | A - 2 |  |  | R3106 | B - 6 | R3256 | A - 6 |
| C3253 | B - 5 | C7F0 | A - 2 | R701 | A - 2 | R3107 | A - 5 | R3258 | B - 5 |
| C3352 | A - 5 | C7F1 | A - 3 | R702 | A - 1 | R3109 | A - 5 | R3259 | B - 4 |
| C3354 | B - 5 |  |  | R703 | A - 1 | R3110 | B - 6 | R3400 | A - 6 |
| C3400 | B - 6 | IC700 | A - 1 | R704 | A - 1 | R3111 | A - 5 | R3401 | A - 5 |
| C3401 | A - 3 | IC701 | B - 1 | R718 | A - 2 | R3112 | B - 6 | R3402 | A - 6 |
| C3415 | B - 4 | IC3000 | B - 5 | R719 | A - 1 | R3113 | A - 5 | R3405 | B - 6 |
| C7A1 | A - 3 | IC3001 | B - 6 | R720 | A - 2 | R3114 | B - 6 | R3406 | B - 6 |
| C7A3 | A - 3 | IC3002 | A - 6 | R723 | B - 2 | R3115 | A - 5 | R3407 | B - 6 |
| C7A4 | A - 2 | IC7A0 | B - 2 | R724 | B - 2 | R3116 | A - 6 | R3408 | B - 6 |
| C7A5 | A - 2 |  |  | R725 | A - 1 | R3117 | A - 6 | R3409 | B - 6 |

## I/NIC/DEC〔COMPONENT SIDE〕


1
2
3
4
5
6
TP3X
TP3R
HC
HB
HZ
IC3000
IC3001
IC3002
IC7A0
IC700
IC701
TP3L
TP3LL
TP3RR
TP3W
TP3Y
TP3M
TP1R
TP1RR
TP74
TP75
HIFI/NIC/DEC
7B896
928D293 0.1.2
0.1.2.3.4.5.6.7.8.9

## PCB-HIFI/NIC/DEC〔COMPONENT SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS |
|---|---|---|---|---|---|
| CF701 | A - 6 | L7A3 | A - 6 | VR3003 | B - 3 |
| CF702 | A - 6 | L7C0 | B - 5 | VR3010 | A - 2 |
| CF7A0 | A - 5 | L7C1 | B - 5 | VR3011 | A - 1 |
| CF7A1 | A - 5 | L7C2 | B - 4 |  |  |
|  |  | L7C3 | A - 5 | X701 | B - 6 |
| D3400 | B - 1 |  |  | X7A0 | B - 5 |
| D3401 | B - 1 | Q3100 | A - 1 |  |  |
| D3402 | B - 1 | Q3101 | A - 1 |  |  |
| D3403 | B - 1 |  |  |  |  |
| D3406 | B - 1 | TP74 | A - 6 |  |  |
| D7C0 | B - 5 | TP75 | A - 6 |  |  |
| D7C1 | B - 5 | TP1R | A - 5 |  |  |
| D7C2 | B - 4 | TP3L | B - 3 |  |  |
|  |  | TP3M | B - 3 |  |  |
| IC700 | A - 6 | TP3R | A - 1 |  |  |
| IC701 | B - 6 | TP3W | A - 3 |  |  |
| IC3000 | B - 2 | TP3X | A - 1 |  |  |
| IC3001 | B - 1 | TP3Y | A - 4 |  |  |
| IC3002 | A - 1 | TP1RR | A - 5 |  |  |
| IC7A0 | B - 5 | TP3LL | A - 3 |  |  |
|  |  | TP3RR | A - 3 |  |  |
| L702 | A - 6 |  |  |  |  |
| L703 | B - 6 | VR756 | A - 6 |  |  |
| L708 | B - 6 | VR3000 | A - 3 |  |  |
| L7A1 | A - 5 | VR3001 | A - 3 |  |  |

| ƆL | ADDRESS |
|---|---|
| 8 | A – 6 |
| 9 | A – 6 |
| 0 | A – 6 |
| 1 | A – 6 |
| 7 | A – 6 |
| 8 | A – 5 |
| 0 | B – 6 |
| 1 | B – 6 |
| 3 | B – 6 |
| 1 | A – 6 |
| 2 | A – 6 |
| 3 | A – 6 |
| 4 | A – 6 |
| 5 | A – 6 |
| 6 | A – 6 |
| 8 | B – 5 |
| 9 | B – 4 |
| 0 | A – 6 |
| 1 | A – 5 |
| 2 | A – 6 |
| 5 | B – 6 |
| 6 | B – 6 |
| 7 | B – 6 |
| 8 | B – 6 |
| 9 | B – 6 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R3410 | B – 6 |
| R3411 | B – 6 |
| R3412 | B – 6 |
| R3413 | B – 6 |
| R3421 | B – 4 |
| R3501 | B – 4 |
| R3504 | B – 4 |
| R3505 | A – 4 |
| R3506 | A – 4 |
| R3561 | A – 6 |
| R3562 | A – 6 |
| R3900 | A – 4 |
| R7A1 | A – 3 |
| R7A2 | A – 3 |
| R7A3 | A – 3 |
| R7A4 | A – 3 |
| R7A5 | A – 2 |
| R7A9 | A – 2 |
| R7C0 | B – 2 |
| R7C1 | B – 2 |
| R7C2 | B – 2 |
| R7C5 | B – 3 |
| R7C6 | B – 3 |
| R7C7 | A – 3 |
| R7C8 | A – 3 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R7C9 | A – 3 |
| R7D0 | A – 2 |
| R7D1 | A – 2 |
| R7D2 | A – 2 |
| R7G2 | A – 2 |
| R7G5 | A – 2 |
| R7G6 | A – 2 |
| | |
| RJ3001 | A – 6 |
| RJ3002 | A – 6 |
| RJ3003 | B – 4 |
| RJ3005 | A – 6 |
| RJ3006 | B – 1 |
| RJ3007 | B – 6 |
| RJ3008 | A – 6 |
| RJ3009 | B – 4 |
| RJ3010 | A – 5 |
| RJ3017 | A – 6 |
| RJ7A0 | B – 3 |
| | |
| TP75 | B – 2 |
| TP3L | B – 5 |
| TP3M | B – 4 |
| TP3R | A – 6 |
| TP3W | A – 4 |

| SYMBOL NO. | ADDRESS |
|---|---|
| TP3X | A – 6 |
| TP3Y | B – 3 |
| TP3LL | A – 4 |
| TP3RR | A – 4 |
| | |
| VR756 | A – 1 |
| VR3000 | A – 4 |
| VR3001 | A – 4 |
| VR3002 | B – 4 |
| VR3003 | B – 4 |
| VR3010 | A – 5 |
| VR3011 | A – 6 |
| | |
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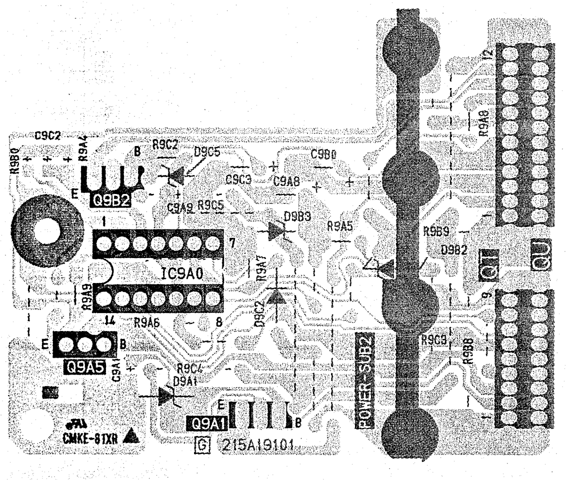
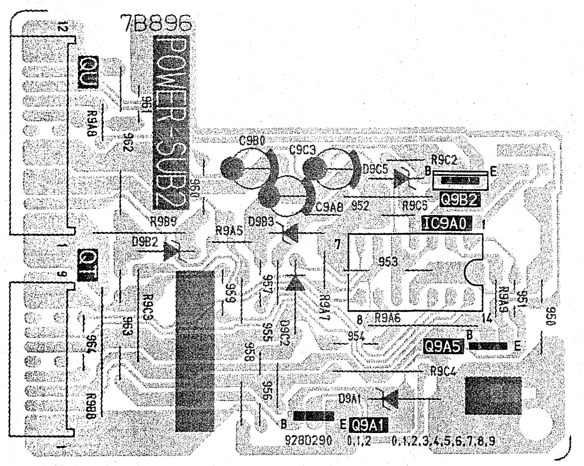
## PCB-POWER-SUB 2 〔SOLDER SIDE〕



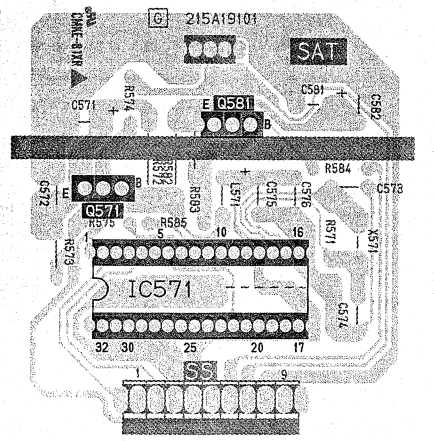
C9C2
R9B0
R9C2
D9C5
C9B0
Q9B2
C9C3
C9A8
C9A9
R9C5
D9B3
R9A5
R569
D9B2
IC9A0
R9A7
R9A6
Q9A5
R9C4
D9A1
Q9A1
POWER-SUB2
R9C8
CMKE-81XR
215A19101

## PCB-POWER-SUB 2 〔COMPONENT SIDE〕



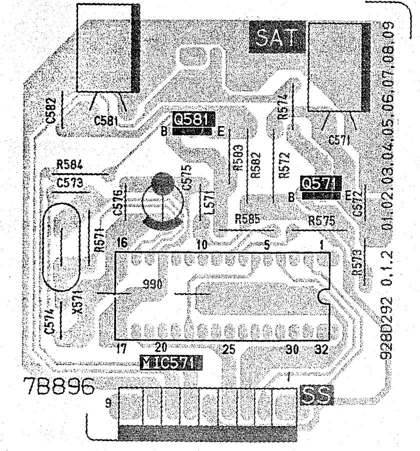
7B896
POWER-SUB2
C9B0
C9C3
D9C5
R9C2
Q9B2
IC9A0
C9A8
R9C5
R9B9
R9A5
D9B3
D9B2
R9A6
Q9A5
R9C4
D9A1
Q9A1
92B0290
0.1.2
0.1.2.3.4.5.6.7.8.9

## PCB-SAT 〔SOLDER SIDE〕 (HS-551V(B) only)



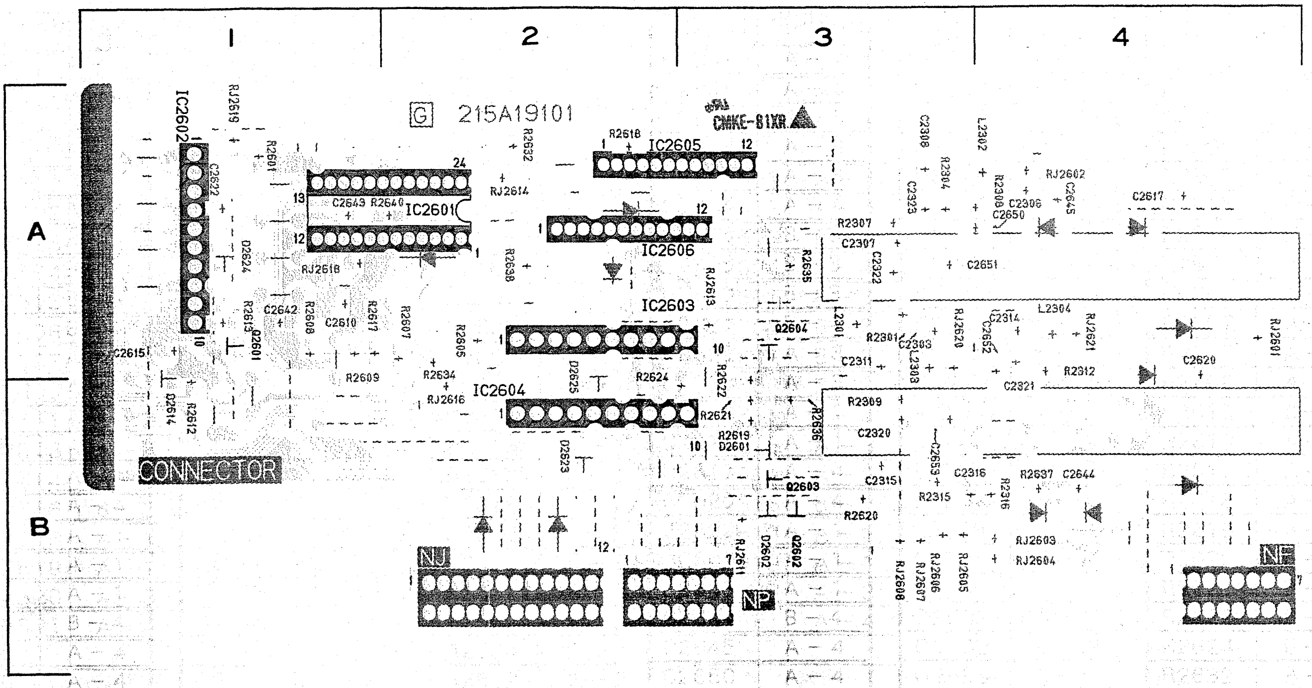
215A19101
CMKE-81XR
SAT
Q581
C571
C581
Q571
R584
R575
R586
IC571
32
30
25
20
17
5
10
16
SS
9

## PCB-SAT 〔COMPONENT SIDE〕 (HS-551V(B) only)



SAT
C581
Q581
C571
R584
C573
Q571
R585
R575
IC571
01.02.03.04.05.06.07.08.09
0.1.2
92B0292
7B896
SS
9

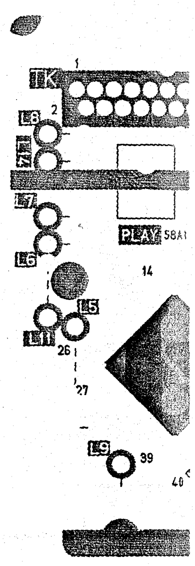
## PCB-CONNECTOR 〔SOLDER SIDE〕


1
2
3
4
A
B
IC2602
215A19101
CMKE-81XR
IC2605
IC2601
IC2606
IC2603
IC2604
CONNECTOR
NJ
NP
NF

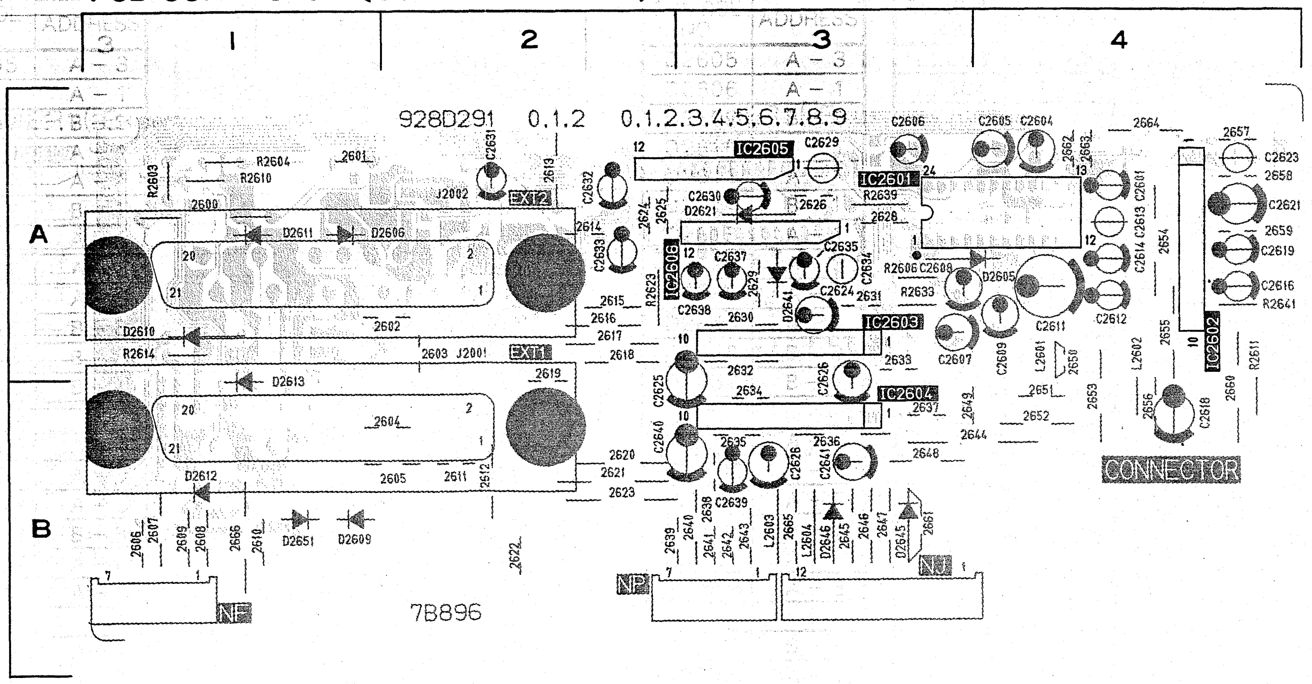
## PCB-CONNECTOR 〔SOLDER SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS |
|---|---|---|---|---|---|---|---|
| C2303 | A – 3 | D2601 | B – 3 | R2304 | A – 3 | R2637 | B – 4 |
| C2306 | A – 4 | D2602 | B – 3 | R2307 | A – 3 | R2638 | A – 2 |
| C2307 | A – 3 | D2614 | B – 1 | R2308 | A – 3 | R2640 | A – 1 |
| C2308 | A – 3 | D2623 | B – 2 | R2309 | B – 3 |  |  |
| C2311 | A – 3 | D2624 | A – 1 | R2312 | A – 4 | RJ2601 | A – 4 |
| C2314 | A – 4 | D2625 | A – 2 | R2315 | B – 3 | RJ2602 | A – 4 |
| C2315 | B – 3 |  |  | R2316 | B – 3 | RJ2603 | B – 4 |
| C2316 | B – 3 | IC2601 | A – 1 | R2601 | A – 1 | RJ2604 | B – 4 |
| C2320 | B – 3 | IC2602 | A – 1 | R2605 | A – 2 | RJ2605 | B – 3 |
| C2321 | B – 4 | IC2603 | A – 2 | R2607 | A – 2 | RJ2606 | B – 3 |
| C2322 | A – 3 | IC2604 | B – 2 | R2608 | A – 1 | RJ2607 | B – 3 |
| C2323 | A – 3 | IC2605 | A – 2 | R2609 | A – 1 | RJ2608 | B – 3 |
| C2610 | A – 1 | IC2606 | A – 2 | R2612 | B – 1 | RJ2611 | B – 3 |
| C2615 | A – 1 |  |  | R2613 | A – 1 | RJ2613 | A – 3 |
| C2617 | A – 4 | L2301 | A – 3 | R2617 | A – 1 | RJ2614 | A – 2 |
| C2620 | A – 4 | L2302 | A – 3 | R2618 | A – 2 | RJ2616 | B – 2 |
| C2622 | A – 1 | L2303 | A – 3 | R2619 | B – 3 | RJ2618 | A – 1 |
| C2642 | A – 1 | L2304 | A – 4 | R2620 | B – 3 | RJ2619 | A – 1 |
| C2643 | A – 1 |  |  | R2621 | B – 3 | RJ2620 | A – 3 |
| C2644 | B – 4 | Q2601 | A – 1 | R2622 | B – 3 | RJ2621 | A – 4 |
| C2645 | A – 4 | Q2602 | B – 3 | R2624 | B – 2 |  |  |
| C2650 | A – 4 | Q2603 | B – 3 | R2632 | A – 2 |  |  |
| C2651 | A – 3 | Q2604 | A – 3 | R2634 | A – 2 |  |  |
| C2652 | A – 4 |  |  | R2635 | A – 3 |  |  |
| C2653 | B – 3 | R2301 | A – 3 | R2636 | B – 3 |  |  |

## PCB-TIMER


TK
L8
L7
L6
PLAY
S8A1
L5
L11
L9

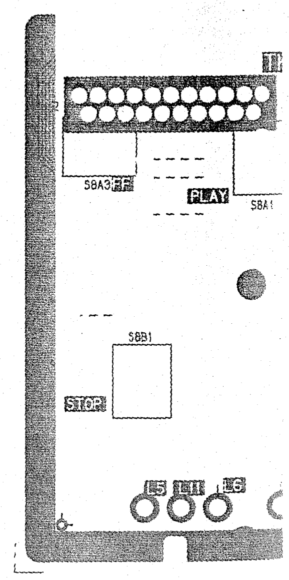
## PCB-CONNECTOR 〔COMPONENT SIDE〕


1
2
3
4
A
B
928D291 0.1.2 0.1.2.3.4.5.6.7.8.9
EXT2
EXT1
J2002
J2001
IC2605
IC2601
IC2606
IC2603
IC2604
IC2602
CONNECTOR
NP
NJ
NF
7B896

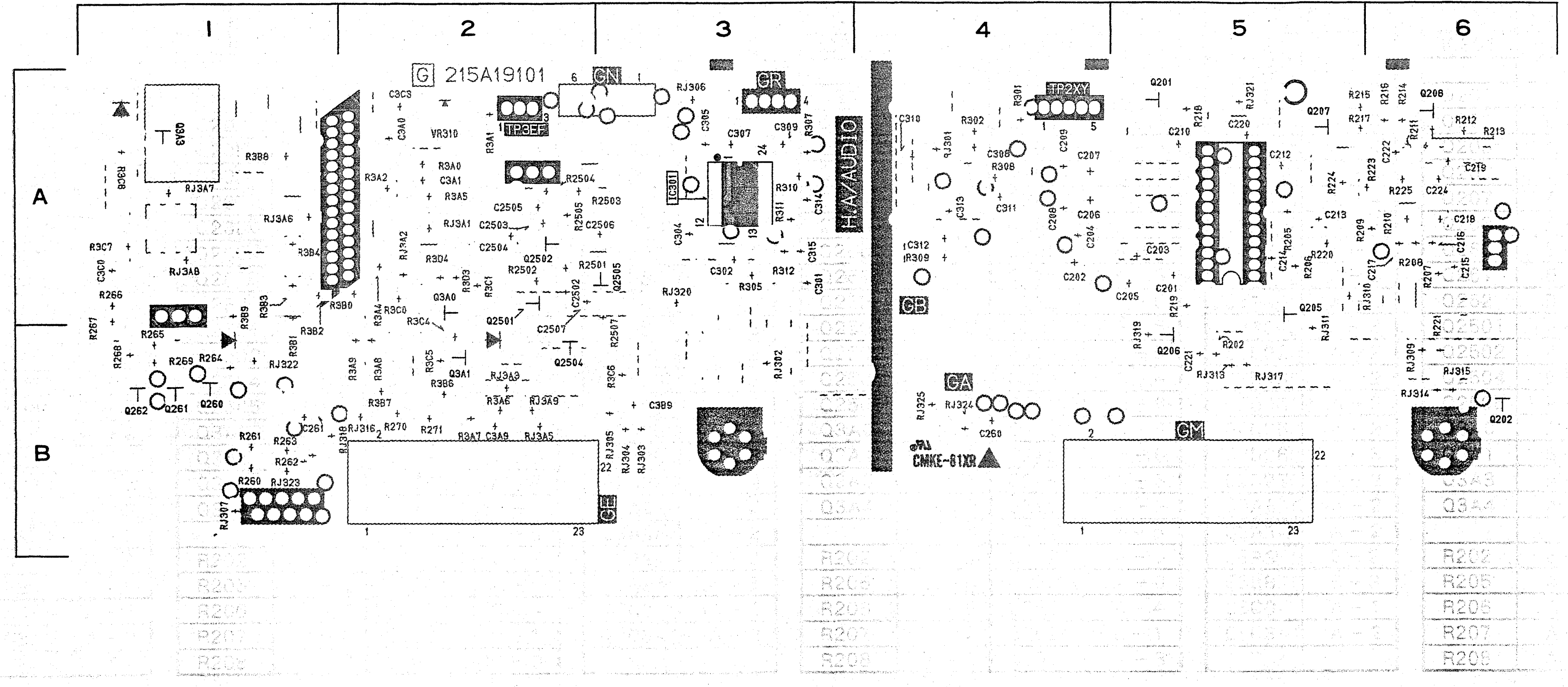
## PCB-CONNECTOR 〔COMPONENT SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS |
|---|---|---|---|
| D2605 | A – 3 | L2603 | B – 3 |
| D2606 | A – 1 | L2604 | B – 3 |
| D2609 | B – 1 |  |  |
| D2610 | A – 1 |  |  |
| D2611 | A – 1 |  |  |
| D2612 | B – 1 |  |  |
| D2613 | A – 1 |  |  |
| D2621 | A – 3 |  |  |
| D2641 | A – 3 |  |  |
| D2645 | B – 3 |  |  |
| D2646 | B – 3 |  |  |
| D2651 | B – 1 |  |  |
|  |  |  |  |
| IC2601 | A – 4 |  |  |
| IC2602 | A – 4 |  |  |
| IC2603 | A – 3 |  |  |
| IC2604 | B – 3 |  |  |
| IC2605 | A – 3 |  |  |
| IC2606 | A – 3 |  |  |
|  |  |  |  |
| J2001 | B – 1 |  |  |
| J2002 | A – 1 |  |  |
|  |  |  |  |
| L2601 | A – 4 |  |  |
| L2602 | B – 4 |  |  |

## PCB-TIMER ( Exc


S8A3
PLAY
S8A1
S8B1
STOP
L5
L11
L6

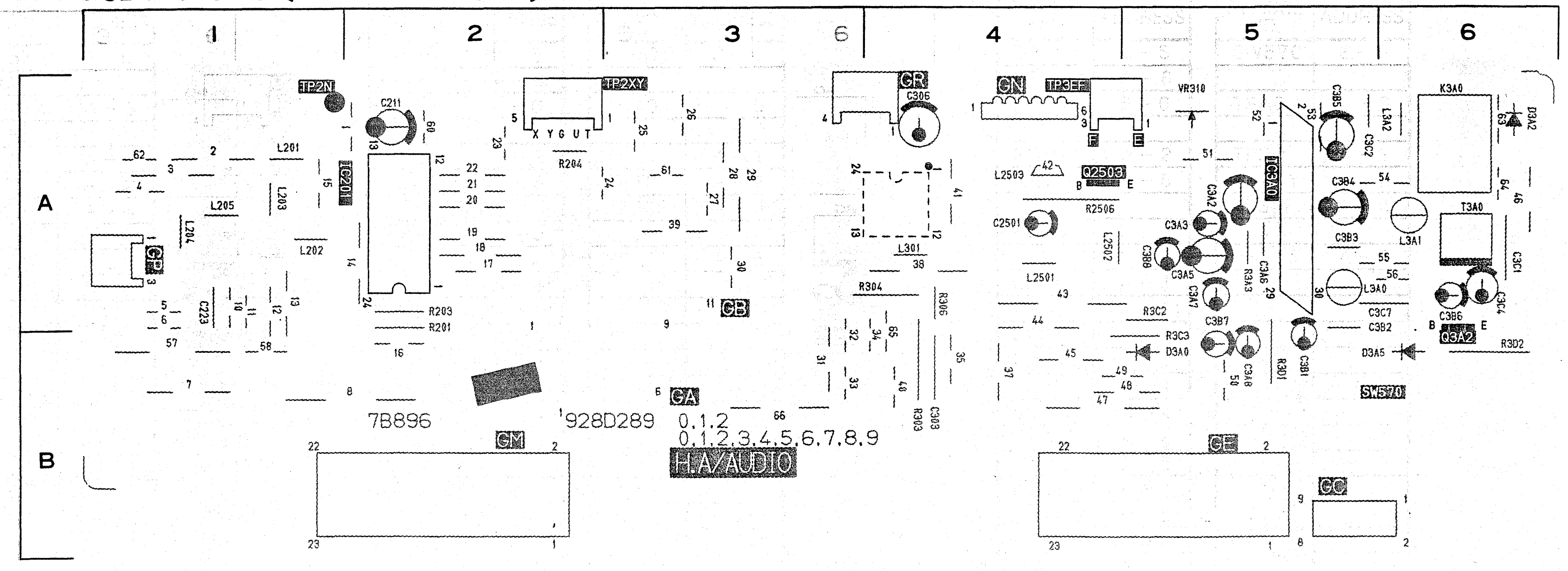
## PCB-HA/AUDIO 〔SOLDER SIDE〕


1
2
3
4
5
6
A
B
215A19101
GN
GR
TP3EF
TP2XY
H/A/AUDIO
GB
GA
GM
GE
CMKE-61XR
Q3A3
VR310
Q2501
Q2502
Q2504
Q201
Q207
Q208
Q202
Q205
Q206
Q260
Q261
Q262
RJ3A7
RJ3A8
RJ3A6

## PCB-HA/AUDIO 〔SOLDER SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS | SYMBOL NO. | AD |
|---|---|---|---|---|---|---|---|---|---|
| C201 | A – 5 | C302 | A – 3 | IC301 | A – 3 | R209 | A – 6 | R269 | |
| C202 | A – 4 | C304 | A – 3 | | | R210 | A – 6 | R270 | |
| C203 | A – 5 | C305 | A – 3 | Q201 | A – 5 | R211 | A – 6 | R271 | |
| C204 | A – 4 | C307 | A – 3 | Q202 | B – 6 | R212 | A – 6 | R301 | |
| C205 | A – 5 | C308 | A – 4 | Q205 | A – 5 | R213 | A – 6 | R302 | |
| C206 | A – 4 | C309 | A – 3 | Q206 | B – 5 | R214 | A – 6 | R305 | |
| C207 | A – 4 | C310 | A – 4 | Q207 | A – 5 | R215 | A – 6 | R307 | |
| C208 | A – 4 | C311 | A – 4 | Q208 | A – 6 | R216 | A – 6 | R308 | |
| C209 | A – 4 | C312 | A – 4 | Q260 | B – 1 | R217 | A – 6 | R309 | |
| C210 | A – 5 | C313 | A – 4 | Q261 | B – 1 | R218 | A – 5 | R310 | |
| C212 | A – 5 | C314 | A – 3 | Q262 | B – 1 | R219 | A – 5 | R311 | |
| C213 | A – 5 | C315 | A – 3 | Q2501 | A – 2 | R220 | A – 5 | R312 | |
| C214 | A – 5 | C2502 | A – 2 | Q2502 | A – 2 | R221 | B – 6 | R2501 | |
| C215 | A – 6 | C2503 | A – 2 | Q2504 | B – 2 | R223 | A – 6 | R2502 | |
| C216 | A – 6 | C2504 | A – 2 | Q2505 | A – 3 | R224 | A – 5 | R2503 | |
| C217 | A – 6 | C2505 | A – 2 | Q3A0 | A – 2 | R225 | A – 6 | R2504 | |
| C218 | A – 6 | C2506 | A – 3 | Q3A1 | B – 2 | R260 | B – 1 | R2505 | |
| C219 | A – 6 | C2507 | A – 2 | Q3A3 | A – 1 | R261 | B – 1 | R2507 | |
| C220 | A – 5 | C3A0 | A – 2 | Q3A4 | A – 2 | R262 | B – 1 | R3A0 | |
| C221 | B – 5 | C3A1 | A – 2 | | | R263 | B – 1 | R3A1 | |
| C222 | A – 6 | C3A9 | B – 2 | R202 | B – 5 | R264 | B – 1 | R3A2 | |
| C224 | A – 6 | C3B9 | B – 3 | R205 | A – 5 | R265 | B – 1 | R3A5 | |
| C260 | B – 4 | C3C0 | A – 1 | R206 | A – 5 | R266 | A – 1 | R3A6 | |
| C261 | B – 1 | C3C3 | A – 2 | R207 | A – 6 | R267 | A – 1 | R3A7 | |
| C301 | A – 3 | | | R208 | A – 6 | R268 | B – 1 | R3A8 | |

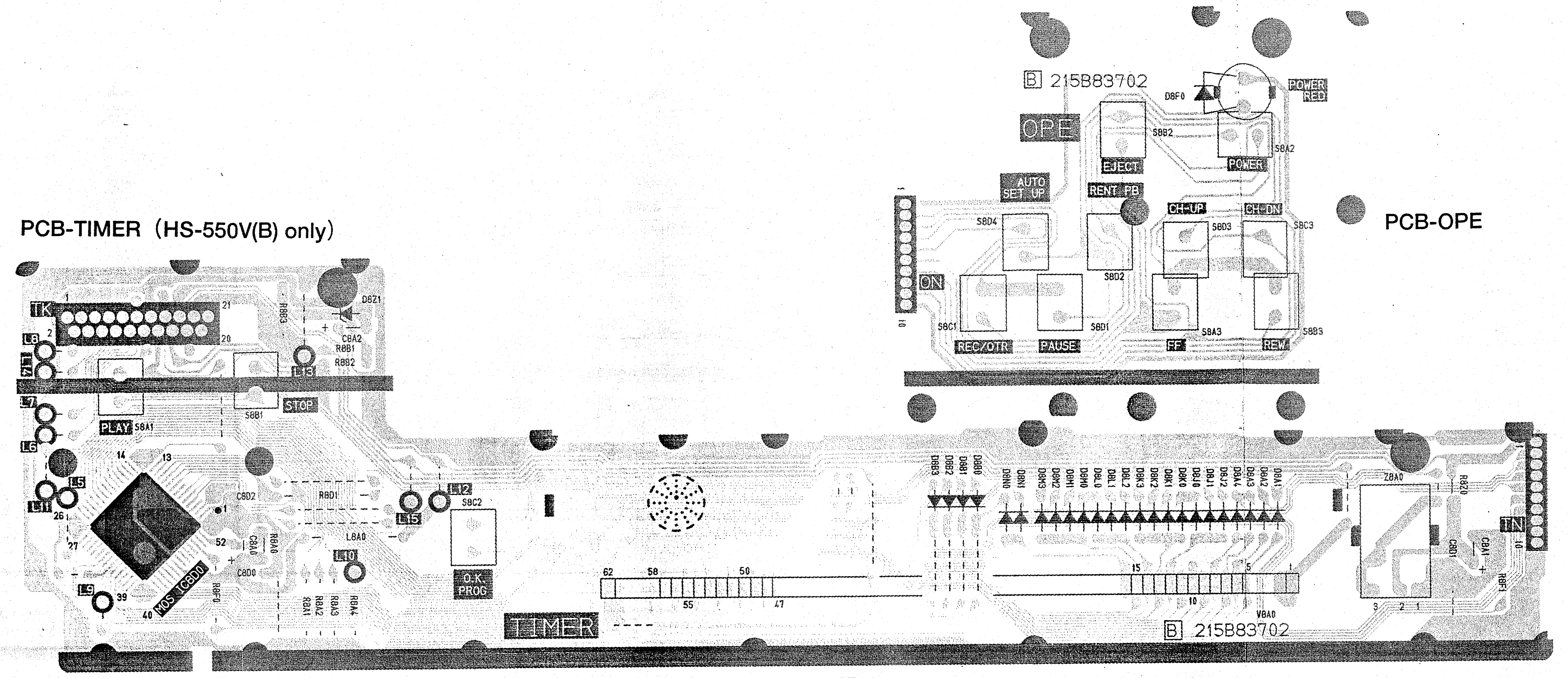
## PCB-HA/AUDIO 〔COMPONENT SIDE〕


1
2
3
4
5
6
A
B
TP2N
TP2XY
GR
GN
TP3EF
VR310
K3A0
D3A2
IC201
IC3A0
Q2503
L2503
C2501
GP
GB
GA
GM
GE
GC
T3A0
L3A0
L3A1
Q3A2
SW570
7B896
928D289
0.1.2
0.1.2.3.4.5.6.7.8.9
H/A/AUDIO

## PCB-HA/AUDIO 〔COMPONENT SIDE〕

| SYMBOL NO. | ADDRESS | SYMBOL NO. | ADDRESS |
|---|---|---|---|
| D3A0 | B – 5 | SW570 | B – 6 |
| D3A2 | A – 6 | | |
| D3A5 | B – 6 | T3A0 | A – 6 |
| | | | |
| IC201 | A – 2 | TP2N | A – 1 |
| IC3A0 | A – 5 | TP2XY | A – 2 |
| | | TP3EF | A – 4 |
| K3A0 | A – 6 | | |
| | | VR310 | A – 5 |
| L201 | A – 1 | | |
| L202 | A – 1 | | |
| L203 | A – 1 | | |
| L204 | A – 1 | | |
| L205 | A – 1 | | |
| L301 | A – 4 | | |
| L2501 | A – 4 | | |
| L2502 | A – 5 | | |
| L2503 | A – 4 | | |
| L3A0 | A – 6 | | |
| L3A1 | A – 6 | | |
| L3A2 | A – 6 | | |
| | | | |
| Q2503 | A – 4 | | |
| Q3A2 | B – 6 | | |
| | | | |

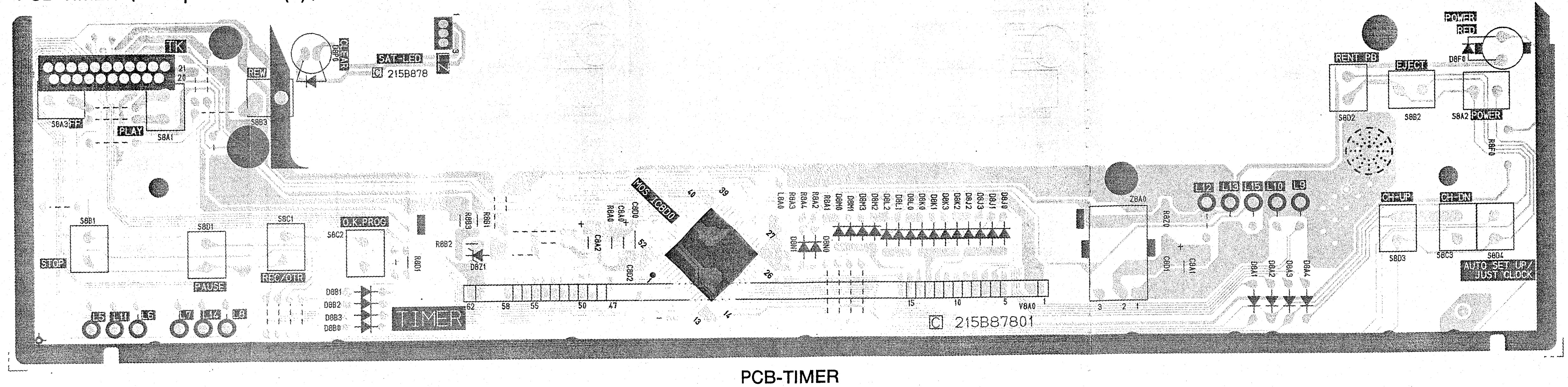
PCB-TIMER (HS-550V(B) only)


215B83702
OPE
POWER RED
EJECT
POWER
AUTO SET UP
RENT PB
CH-UP
CH-DN
ON
REC/OTR
PAUSE
FF
REW
TK
PLAY
STOP
O.K. PROG
MOS IC8D0
TIMER
TN
215B83702

PCB-OPE

PCB-TIMER

PCB-TIMER ( Except HS-550V(B) )


TK
REW
CLEAR
SAT-LED
215B878
FF
PLAY
STOP
PAUSE
REC/OTR
O.K.PROG
TIMER
MOS IC8D0
RENT PB
EJECT
POWER
POWER RED
CH-UP
CH-DN
AUTO SET UP/ JUST CLOCK
215B87801

PCB-TIMER

| RESS |
|---|
| – 3 |
| |
| – 5 |
| – 6 |
| – 5 |
| – 5 |
| – 5 |
| – 6 |
| – 1 |
| – 1 |
| – 1 |
| – 2 |
| – 2 |
| – 2 |
| – 3 |
| – 2 |
| – 2 |
| – 1 |
| – 2 |
| |
| – 5 |
| – 5 |
| – 5 |
| – 6 |
| – 6 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R209 | A – 6 |
| R210 | A – 6 |
| R211 | A – 6 |
| R212 | A – 6 |
| R213 | A – 6 |
| R214 | A – 6 |
| R215 | A – 6 |
| R216 | A – 6 |
| R217 | A – 6 |
| R218 | A – 5 |
| R219 | A – 5 |
| R220 | A – 5 |
| R221 | B – 6 |
| R223 | A – 6 |
| R224 | A – 5 |
| R225 | A – 6 |
| R260 | B – 1 |
| R261 | B – 1 |
| R262 | B – 1 |
| R263 | B – 1 |
| R264 | B – 1 |
| R265 | B – 1 |
| R266 | A – 1 |
| R267 | A – 1 |
| R268 | B – 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R269 | B – 1 |
| R270 | B – 2 |
| R271 | B – 2 |
| R301 | A – 4 |
| R302 | A – 4 |
| R305 | A – 3 |
| R307 | A – 3 |
| R308 | A – 4 |
| R309 | A – 4 |
| R310 | A – 3 |
| R311 | A – 3 |
| R312 | A – 3 |
| R2501 | A – 2 |
| R2502 | A – 2 |
| R2503 | A – 3 |
| R2504 | A – 2 |
| R2505 | A – 2 |
| R2507 | A – 3 |
| R3A0 | A – 2 |
| R3A1 | A – 2 |
| R3A2 | A – 2 |
| R3A5 | A – 2 |
| R3A6 | B – 2 |
| R3A7 | B – 2 |
| R3A8 | B – 2 |

| SYMBOL NO. | ADDRESS |
|---|---|
| R3A9 | B – 2 |
| R3B0 | A – 2 |
| R3B1 | B – 1 |
| R3B2 | A – 1 |
| R3B3 | A – 1 |
| R3B4 | A – 1 |
| R3B6 | B – 2 |
| R3B7 | B – 2 |
| R3B8 | A – 1 |
| R3B9 | A – 1 |
| R3C0 | A – 2 |
| R3C1 | A – 2 |
| R3C4 | B – 2 |
| R3C5 | B – 2 |
| R3C6 | B – 3 |
| R3C7 | A – 1 |
| R3C8 | A – 1 |
| R3D3 | A – 2 |
| R3D4 | A – 2 |
| | |
| RJ301 | A – 4 |
| RJ302 | B – 3 |
| RJ303 | B – 3 |
| RJ304 | B – 3 |
| RJ305 | B – 3 |

| SYMBOL NO. | ADDRESS |
|---|---|
| RJ306 | A – 3 |
| RJ307 | B – 1 |
| RJ309 | B – 6 |
| RJ310 | A – 6 |
| RJ311 | B – 5 |
| RJ313 | B – 5 |
| RJ314 | B – 6 |
| RJ315 | B – 6 |
| RJ316 | B – 2 |
| RJ317 | B – 5 |
| RJ318 | B – 2 |
| RJ319 | B – 5 |
| RJ320 | A – 3 |
| RJ321 | A – 5 |
| RJ322 | B – 1 |
| RJ323 | B – 1 |
| RJ324 | B – 4 |
| RJ325 | B – 4 |
| RJ3A1 | A – 2 |
| RJ3A2 | A – 2 |
| RJ3A3 | B – 2 |
| RJ3A5 | B – 2 |
| RJ3A6 | A – 1 |
| RJ3A7 | A – 1 |
| RJ3A8 | A – 1 |

| SYMBOL NO. | ADDRESS |
|---|---|
| RJ3A9 | B – 2 |
| | |
| TP2XY | A – 4 |
| TP3EF | A – 2 |
| | |
| VR310 | A – 2 |
| | |
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